



Critical Signs: Investigating Typography as an expanded practice

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phd by design

DRS2018 Limerick
PhD by Design
Satellite Session
Monday the 25th June 2018

***How design can be a catalyst for change and how
practice-based research can shape the relationship
between different social, economic and political actors?***

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DRS

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Clare St., Limerick

Ireland

HUB space

Kemmy Business School,

University of Limerick

Plassey Ave, Sreelane

Limerick

Ireland

For more information,
please contact:

ALISON THOMSON

0044 (0)78 4659 8417

MARIA PORTUGAL

0044 (0)78 6439 6907

PHDBYDESIGN

**DRS
2018**

Bank of Ireland



foreword

The aim of PhD by Design events is to vocalise, discuss and work through many of the topical issues of conducting a practice-based PhD in design and to explore how these are re-shaping the field of design. They bring together designers undertaking practice-based doctoral research as well as supervisors to explore the many aspects of knowledge production within and across academic institutions.

The next PhD By Design event takes place on Monday the 25th June 2018 and is part of the Design Research Society (DRS) conference which runs on the 26th - 28th June 2016 at the University of Limerick. In connection to the DRS conference, this one day event will explore how and to what extent design research(ers) can be a catalyst for change.

Some questions we seek to explore are:

- How does your PhD in Design, frame and address the societal problems that face us?
- Where do you see your role as early career researcher when wanting to act as catalyst of change?
- What values and worldviews do you draw on when working towards change?
- What kind of change do you want to bring about through design?
- With whom do you collaborate in order to bring about change and how do you negotiate different agendas?
- What desirable or undesirable effects does your practice-based research have?
- In what ways do you think that your research is re-shaping the relationship between different social, economic and political actors?
- In what ways do you think your PhD is re-framing ideas about what design can do in the world?

The event activities are designed to provide a supportive and engaged environment in which to share practices, experiences, dilemmas, failures and doubts in order to contribute to the wider practice-based design research community. As part of the event, participant produce and negotiate a set of questions, concerns and provocations, that are carried forward to the wider DRS community during the conference that follows. Answers to these questions will be published at the end of the DRS conference as part of the PhDy by Design Instant Journal #5.

We look forward to an energising PhD by Design day and an intense DRS week with you,

Alison Thomson, Maria Portugal & Søren Rosenbak

keynotes, discussants & team

DISCUSSANTS

Adam De Eyto
Dan Lockton
Joe Lane
Jonathan Chapman
Marcus Hanratty
PJ White
Sam Russell
Simon O'Rafferty
Uta Hinrichs

ORGANISING COMMITTEE

Alison Thomson
Maria Portugal
Søren Rosenbak

LOCAL ORGANISING TEAM

CHAIRS

Danielle Arets
Fiona MacLellan
Jana Thierfelder

participants

Adriana Cobo

University of the Arts London

Alastair Brook

University College Cork

Ann Bosserez

Hasselt University

Anna Ulahelová

*Academy of Fine Arts in
Design, Bratislava*

**Annika Olofsdotter
Bergström**

Blekinge Institute of Technology

Aurélie Daanen

*Université de Technologie de
Troyes*

Barend Klitsie

Delft University of Technology

Brenda Duggan

Dublin Institute of Technology

Carmen Bruno

Politecnico di Milano

Caroline Yan Zheng

Royal College of Art

Catharina Henje

Umeå University

Cathryn Hall

University of the Arts London

Con Kennedy

Dublin Institute of Technology

Daniel G. Cabrero

University of West London

Danielle Arets

Design Academy Eindhoven

Daphne Menheere

*Eindhoven University of
Technology*

Davide Antonio Gambera

IADE, Universidade Europeia

Denielle Emans

The University of Queensland

Dion Tuckwell

Monash University

Duncan Brown

Loughborough University

Erik Sandelin

Konstfack University of Arts

Fanny Giordano

Aalborg University

Fiona J. MacLellan

Glasgow School of Art

Francesca Bozza

Università di Roma

Francis Carter

Carnegie Mellon University

Georgina Nadal

*Manchester Metropolitan
University*

Gwen Lettis

University of Limerick

Ilze Loza

Art Academy of Latvia

Ines P. Junge

University of Oslo

Irem Tekogul

Illinois Institute of Technology

Jack Champ

Kingston University London

Jana Thierfelder

University of Berne

Johanna Oehlmann

*Nottingham Trent Business School
(NTU) & Copenhagen Business
School (CBS)*

Kensho Miyoshi

Royal College of Art

Laetitia Forst

University of the Arts London

Patrizia D'Oliveo

Delft University of Technology

Laura Gottlieb

Mälardalen University

Louise De Brabander

KU Leuven University

Marguerite Benony

Université Paris Diderot

Maria Mullane

*UAL University of The Arts
London College of Fashion*

Maria Murray

University College Cork

Mariam Asad

Georgia Institute of Technology

Marion Lean

Royal College of Art

Marita Sauerwein

Delft University of Technology

Marta Camps

Design College of Barcelona

Meg Parivar

Lancaster University

Michelle O'Keeff

Cork Institute of Technology

Monica Lindh Karlsson

Umeå Institute of Design

Naureen Mumtaz

University of Alberta

Nicholas Baroncelli

Torretta
Umeå University

Niina Turtola

University of Lapland

Pankhuri Sanjay Jain

Edinburgh Napier University

Pauline Clancy

Ulster University

Peter Kun

Delft University of Technology

Rahmin Bender

Fielding Graduate University

Rose Dumesny

Université de Nîmes and Sense

Rosendy Galabo

Lancaster University

Rowan Page

Monash University

Saara-Maria Kauppi

*Norwegian University of Science
and Technology*

Saoirse Higgins

Glasgow School of Art

Sarah Hayes

Cork Institute of Technology

Sebastian Stadler

TUMCREATE Ltd.

Silvia Mata-Marin

Carnegie Mellon University

Teksin Kopanoglu

Cardiff Metropolitan University

Tot Foster

The Open University

Xaviera Sánchez de la

Baquera Estrada

Umeå University

Xueliang Li

Technology University of Delft

Zoe Bonnardot

*EDF R&D / Université de Nîmes /
Université Technologique de Troyes*

satellite session

Monday 25th June 2018

0800-0830	REGISTRATION AND BREAKFAST
Building Entrance	Tea, coffee & pastries
0830-0900	WELCOME
	PBD, DRS and local team
0900-1015	MESSY INTRODUCTIONS
	90 seconds per participant
1015-1215	DISCUSSION SESSIONS
	10 groups of 6 presentations lead by a chair a discussant
1215-1330	LUNCH
1330-1500	WORKSHOPS
1500-1530	COFFEE BREAK
1530-1700	NEW INSTANT JOURNAL ACTIVITY
	Designing questions for DRS
1700-1730	PLANS FOR NEXT DAYS AND WRAPPING UP
1800	DRINKS RECEPTION
	Produce the instant journal to be launched that evening

hub

25th-28th June 2018

Following the main event on Monday 25th June 2018, PhD By Design will not lose momentum, extending its presence throughout the rest of the DRS Conference. From 26th to 28th June 2016, we will relocate to the University of Limerick, Kemmy Business School Building, where the PhD By Design HUB will be set up in order to continue our activities and the work on the Instant Journal #5.

The HUB will be a welcoming social space with an additional daily programme of workshops* and conversations. The space will also serve as the focal point for engaging the wider DRS community over the questions, concerns and provocations that were produced as part of the event. So come over and join us for some lively design and research led workshops or to relax and network with other DRS delegates. See you there!

From the 26th to the 28th of June 2018 (until 4pm) we are accepting contributions for the fifth edition of our Instant Journal. You can find our call for participation at the DRS registration desk or online on our website. You can email or tweet your contribution at *team@phdbydesign.com* or *@phdbydesign* (please indicate the question number).

session 1

ORGANISATIONAL CHANGE

discussant **Jonathan Chapman**
chair **Danielle Arets**

Con Kennedy
Duncan Brown
Johanna Oehlmann
Meg Parivar
Aurélie Daanen
Barend Klitsie
Michelle O'Keeffe

session 4

TEXTILES

discussant
chair

Laetitia Forst
Marion Lean
Georgina Nadal
Cathryn Hall
Caroline Yan Zheng

session 2

PEDAGOGY

discussant **Adam De Eyto**
chair

Marte Camps
Monica Lindh Karlsson
Naureen Mumtaz
Dion Tuckwell
Alastair Brook
Gwen Lettis

session 5

DATA & SUBJECTIVITY

discussant **Uta Hinrichs**
chair **Jana Thierfelder**

Peter Kun
Sarah Hayes
Daphne Menheere
Xueliang Li
Flavio Montagner

session 6

VISUAL COMMUNICATION

discussant **Joe Lane**
chair

Niina Turtola
Pauline Clancy
Denielle Emans
Brenda Duggan
Ilze Loza

session 3

CO-DESIGNING HEALTH

discussant **PJ White**
chair

Teksin Kopanoglu
Rowan Page
Francis Carter
Davide Antonio Gambera
Maria Mullane

session 7

HUMAN/NONHUMAN FUTURES

discussant **Dan Lockton**
chair

Irem Tekogul
Marguerite Benony
Saara-Maria Kauppi
Erik Sandelin
Saoirse Higgins

session 10

CREATIVITY & TOOLS

discussant **Marcus Hanratty**
chair

Laura Gottlieb
Carmen Bruno
Rosendy Galabo
Zoe Bonnardot
Anna Ulahelová

session 8

DECOLONISING DESIGN/ GLOBAL SOUTH/POSTNORMAL

discussant **Sam Russell**
chair

Silvia Mata-Marin
Daniel G. Cabrero
Nicholas Baroncelli Torrett
Xaviera Sánchez de la
Baquera Estrada

session 11

SENSE & MATERIALITIES

discussant
chair

Marita Sauerwein
Rose Dumesny
Sebastian Stadler
Kensho Miyoshi
Catharina Henje
Pankhuri Sanjay Jain

session 9

PUBLIC/CIVICS/EMPOWERMENT

discussant **Simon O'Rafferty**
chair **Fiona MacLellan**

Fanny Giordano
Mariam Asad
Tot Foster
Jack Champ
Kirsten Moegerlein
Maria Murray

session 12

SPACE & POWER

discussant **Nadia Pantidi**
chair

Francesca Bozza
Adriana Cobo
Louise De Brabander
Annika Olofsdotter Bergström
Ann Bosserez

participants

Adriana Cobo

[@ADIPAWAR](http://WWW.UID.UMU.SE/ADITYAPAWAR)



keywords

Public-Space, Performance, Taste

affiliation

Central Saint Martins, University of the Arts London

Spatial Practices

United Kingdom

bio

Adriana Cobo works on critical performance for public space. Trained as an architect and scenographer, she has explored Narco-architecture, panoptical structures and the ethics of modernism through research and practice. Her installations *Panorama of a Room* (2005-2007) and *Drawing the City* (2004-2009) have been exhibited in Cali, Bogota, London and Wroclaw. Her performances *The Great Unwashed* (2015-16), and *The Disappearing Garden* (2017-18) in London's Granary Square, constitute her current research-practice.

research

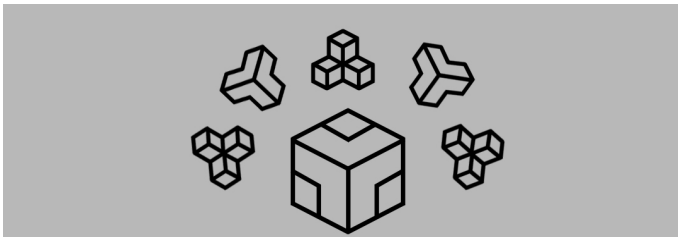
My PhD is an investigation into the field of architecture, which focuses on the codes and practices characteristic of contemporary public space. The project sets out to test and question political and ideological structures at play within the public realm, through performance practice. The research is consolidated through a critical approach to prototypical public space designs, produced as extensions and representations of specific dominant power structures, and sustained through specific aesthetic codes. Core constituting categories of public space are researched to inform the general framework for both the building of theory and the design of research-practice. Testing performance as methodology, the thesis engages critically in the negotiation of more open and civic practices, intended to test the potential visibility of suppressed activities, performed by individuals displaced from and/or under-represented in chosen locations. Research-practice develops as a series of interventions tailored for Granary Square, a privately owned public space (POPS) in London's King's Cross.

question

How to maintain the agency of my design-practice, when it demands the negotiation of different, and seemingly mutually exclusive agendas (corporate cultures and democratic civic life, for example)?

Alastair Brook

DSGNWORKSHOP.COM/



keywords

Affordance, Participation, Education

affiliation

University College Cork

Cork Centre for Architectural Education

Republic of Ireland

bio

Alastair is a product designer holding an M.Des on the theory and application of Affordance Based Design in the field of design for need, and beginning his doctoral research at University College Cork. Current research focuses on Participatory Design and its implications on universal design literacy. The author encourages populations to solve fundamental needs with 'design' as the main educator and facilitator, as expressed through his co-founded NGO- see website.

research

By focusing on the individual alone, the design discipline often fails to consider broader cultural and social biases- instead, preferring immediate gratification over long-term pay offs. This introspection conveniently absolves our broader responsibility to society. Designers, perhaps, hold an influential seat at the proverbial table, and are able to lead an evolution towards wider contextual and longer-term design methodologies (Girling & Palaveeva, 2017).

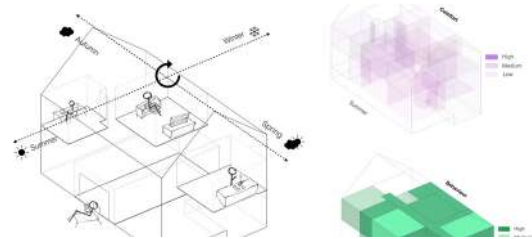
Designers have enough inclusive discourse with other stakeholders of the process (primarily user and artefact) to incite change; a point expressed within current Affordance Based Design theory, exemplified in Participatory Design methodology, and extremified within the Decolonising Design debate.

The intent is to guide us from an individual perspective of design methodology, to an interindividual one; with recognition of the individual in relation to the multiplicity of others (Oughourlian, 2016). The consideration of the word 'us' intends to reflect this fact, and include all readers in the following proposition; that the design disciplines must be revaluated as a universal instructional tool. Through the appraisal of ontological, philosophical, and psychological theory, we can engage with the plurality of communities' cultural and social biases towards their environment, from which design can encourage long-term solutions that better standard of living.

question

What are the most potentially volatile ethical concerns when approaching the relationship between different social, cultural and economic shareholders- both in terms of the shareholders as well as that of the designer and design discipline in general? And what is the best way to address such ethical concerns?

Ann Bosserez



keywords

Energy-efficiency, user-centred methodology, architectural design

affiliation

Hasselt University

Faculty of Architecture and Arts

Belgium

bio

I am Ann Bosserez, designer, interior-architect and PhD-student. I studied a professional Bachelor in Interior design, where I found a growing interest for ecological design and interior design theory. Secondly, when studying for a Master in Interior architecture my interests flourished into a passion for sustainability and social sciences. Currently, I am developing an alternative user-centred approach for energy-efficient dwellings which enables a dynamic way of living throughout the seasons.

research

There is a strong focus on energy-efficiency within sustainable building. Often an object-centred approach is implemented by applying large amounts of materials and active systems. This brings forth higher renovation costs and static and constant living environments where the user is considered passive. However, it is proven that user practices have a significant impact on the energy demand. Therefore, within social-technical studies, the resident is considered active and dynamic when aiming for energy-efficiency. In practice, energy-efficiency and users are often still separately analysed and integrated in the design. This leads to difficulties in achieving a synergy between both aspects.

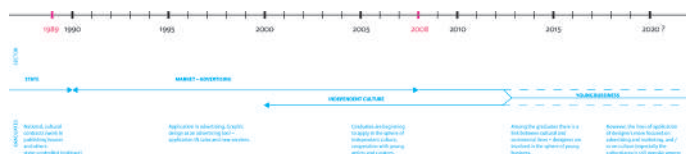
Therefore, this PhD-project aims to develop an alternative user-centred approach for energy-efficient dwellings by considering users and their demand for energy from the analysis phase on. The research develops an analysis method that supports the collection, analysis and visualization of the residents' living pattern (use, occupancy and experience of the dwelling) to support designers when analysing the complex interactions between user and environment. The method helps to derive the users' dynamic comfort needs, spatial preferences and energy demand, input that is crucial for the further design of an energy-efficient building by means of a user-centred approach.

question

How can the knowledge gained and developments derived from practice-based design research become more applicable, usable, readable, attractive in (architectural) practice where it truly can serve as a catalyst for change?

Anna Ulahelová

CARGOCOLLECTIVE.COM/AU-FOLIO



keywords

Graphic designer, Role, Generational practice

affiliation

Academy of Fine Arts in Design, Bratislava
Department of Visual Communication
Slovakia

bio

I am working as external researcher for Slovak Museum of Design. I work also together with Slovak Centre for Design as organizer and curator of Slovak National Design Award 2016/2018. I did my diploma project – practice research in graphic design of information system of public transport in Bratislava.

research

In my research I made field observation and interviews about generations who graduated in graphic design in Bratislava at the Academy of Fine Arts and Design. I interest about how the role of designers changed after 1989 where the education of designers started. In my methodology I also collected and analysed available materials about situation in design, work with archives, museums collections etc. Through the practice and experience of old generations I explain how the role of graphic designers in Slovakia developed and where is their position today. As a graphic designer I used tools for visualisation and design thinking to document abstract situations about designers as f.e. development of freelancers position, diagrams about social structures, timelines etc. The focus of my work is with this “theoretical-practical” methods explain, argument and also make critical reflexes of discourse of contemporary graduates and their preference to be more artists then social innovators. I would like to do a vision of designer position for future Slovakia in the end – in design focus, topics, and professional vision of designers and their future role in society. It can work as education tool for next students to show design reflection from structural point of view.

question

How can self-reflection of practice and professional development make Slovak graphic designers more involved to social innovations and public issues?

Annika Bergström

MEEMBRACING.WORDPRESS.COM



keywords

Playful, nomad, city

affiliation

Blekinge Institute of Technology
Department of Technology and Aesthetics
Sweden

bio

My PhD is placed within feminist techno science area and I participatory explore how site-specific play can challenge our relations to urban places, citizenship and belonging.

My work includes playful site-specific interventions, together with different groups of women. My licentiate thesis was about the project leaders role and work from a participatory action research perspective. I have a background as theatre director and game designer.

research

My research is a participatory exploration in how a feminist design practice, inspired by Braidotti's feminist figuration 'the nomad' and Puig de la Bellacasa's 'caring and touching' find expressions through site-specific playing, to create relations with cities, humans and non-humans objects. My work, as a playing process, has lead me to think about a new kind of citizenship. Not as a static construction but as a citizenshiping, an active intra- making of belonging, with a playful engagement by care and touch.

By locating and integrating the play with the urban environment, playing is not done in isolation, but rather becomes an performative collective manifestation in the public. My work is also about designing possibilities for playfulness and exploration in cities (Ehn, 2008). Physical play can be seen as a nomadology where players can test their alternative citizenshiping, by challenging the city's structures, both physically and socially.

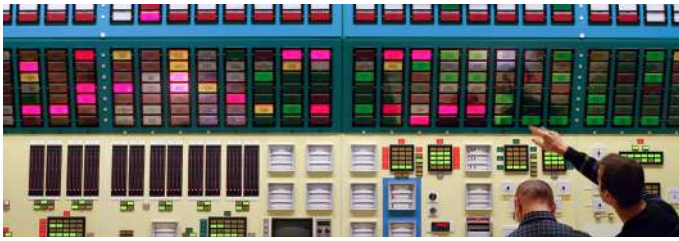
The nomadic figuration inspires how site-specific plays combine, rather than organize, into an unfixated entanglement of multiple connections. It is a resistance to static values and the dominant views that exist, for example, what citizenship is, what experiences are about or what a place could be (Braidotti, 2011).

question

How can play, as a figuration, in urban places be a way to design an engaging citizenship?

Aurélie Daanen

AURELIEDAANEN.COM/



keywords

Intermundia posture, Cooperative work, Industrial environment

affiliation

Université de Technologie de Troyes (UTT)

Tech-CICO & EnsadLab

France

bio

Aurélie Daanen is a product designer, graduated with a Master's Degree in design and innovation. She is working as a PhD student, on an industry-oriented doctoral thesis. Her research focuses on design contribution in the development of artifacts for cooperative work in a high-risk industrial organization. This thesis comes within the scope of a dialogue between design and both theoretical and methodological frameworks of cognitive ergonomics.

research

This research links design and cognitive ergonomics disciplines. It questions the contribution of design with a theoretical, empirical and technological approach, for the implementation of collaborative work devices in a social, organizational, and technical complex organization.

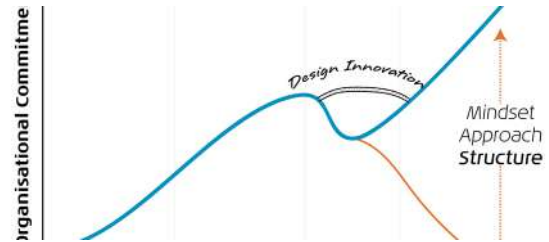
This thesis hinges on a double issue: first of all, a research through design, which is based on an empirical data collection about actual work settings and more specifically coordinative practices, and the role played by artifacts as a support of this cooperative work. This no-anecdotal understanding about work situation is a base to design project. This design project includes two different natures of outputs. One is about tangible elements for the enhancement of the existing system inspired by actual assessment. The other category is more exploratory and aims at identifying systemic shifts and developing design probes.

The second issue deals with the connection of design & cognitive ergonomics' challenge. This part of research is about design. The ambition is to engage in a categorization of types of collaborations between design and other disciplines. Through these different perspectives, we examine our own point of view and more specifically we bring out issues about similarities, frictions, redundancies and differences between design and cognitive ergonomics.

question

Drawing on another discipline in his research, designer enlarges his knowledge : how can he deal with this expertise and how it is inflecting on the design process and timeline?

Barend Klitsie



keywords

Strategic Design, Corporate Innovation, Valley of Death

affiliation

Delft University of Technology

Product Innovation Management

Netherlands

bio

I'm a Strategic Product Designer and my research focusses on corporate innovation and strategic design. My master thesis combined the Dynamic Capabilities and Innovation Strategy literature to define measurable Innovation Capabilities. I now focus on how a design approach to innovation helps to develop innovations that are implementable. As a researcher, I use action research to keep one foot in industry and one in academia.

research

This PhD research focusses on the 'Valley of Death' (VoD) of corporate innovation. The VoD describes the difficulty of implementing, accelerating or commercializing an innovation across an organization, even after a successful pilot or prototype. Literature indicates that a design approach to innovation may mitigate many of the barriers related to this valley of death.

However, for the valley of death to be mitigated, a design approach to innovation is only part of the puzzle. My research focusses primarily on how large corporations can design an infrastructure that fosters design driven innovation. This research will thus look at elements such as budget processes, organizational design, cost-centers and KPI's and determine how these elements influence the VoD if a design approach is used.

This is an action research project. The researcher is embedded in a large airline corporation as Design Innovation Catalyst. The researcher aims to bring academic design literature to practice, to reflect on its practical virtue and uncover opportunities for new research frameworks. By being immersed in the researched context, the researcher aims to uncover practical knowledge regarding design and innovation management and to improve the situation of the studied organization.

question

What is the best approach: read literature and study the object with an academic framework in mind, or study the object and afterwards try to uncover if the data can be linked to known frameworks?

Brenda Duggan

[@DUGGAN_BRENDA](#)



keywords

Visual communication, Active, Speculative

affiliation

Dublin Institute of Technology

Department of Design

Ireland

bio

Brenda Duggan is an educator/researcher at Dublin Institute of Technology, lecturing design at graduate and undergraduate level, in the area of visual communication. Her areas of interest include design for social innovation, co-design and experience design.

Presently, she is studying a PhD at Sheffield Hallam University, questioning the role of designer in society. This research will interrogate ways communication design can contribute to increased civic engagement in a city.

research

Visual communication Design as discursive, enacting critical dialogue for people. Visual communication (VC) design has a greater part to play in facilitating local, situated stories about place. There has been an over emphasis in VC design that establishes a unifying message based on an abstract, modernist 'language of vision'. The main function, for instance, of branding and identity in VC design is minimising ambiguity, priding itself on unifying a story through our logos and signs. But life is messy, diverse, multi-vocal and always on the move. Visual communication practice has a greater role to play as a discursive, critical dialogue for people living locally in a real community.

This research is concerned in examining our communicative language as active, performative and knotted within the fabric of our everyday living. My research is concerned with 'experience design' as situated poly-vocal knowledges. My approach is ethnographic, questioning how the vocabularies of VC design act as a catalyst to increase visibility of place and a community's reading of it. This project is 'research through design', using design methods of observation - drawing, collecting words and establishing connections and intersections through walking, observing and mapping. The research interrogates situated and performed practice for increasing the discursive attributes for visual communication design.

question

How can visual communication design perform as a critical discursive practice for people living locally at a community level?

Carmen Bruno

WWW.IDEACTIVITY.POLIMI.IT [@CARMENSBROWN](#)

keywords

Creativity, Digital technology, Co-design

affiliation

Politecnico di Milano

Design

Italy

bio

Carmen investigates new spaces for designers from a human-centred perspective, and experiment new approaches, based on design thinking and co-design, that leads to radical innovation. In 2015 she joined IDEActivity Center, a centre for excellence in Creativity and Design whose aim is to give value to all aspects of creativity, promoting innovation through design. She co-founded in 2012 Visibilio Design Project. She graduated in Industrial Design at Politecnico di Milano.

research

Creativity - the ability to produce novel and useful ideas - has become a democratic necessity and the most important human skill to face the uncertainties brought by the digital era. Digital technologies (i.e., IoT, Computing technology devices, etc...) are influencing the social, behavioural and cognitive development of human being. In this scenario, creativity itself is redefined, moving from an individualistic to a collaborative process. Online participation is associated with heightened connectivity and an unprecedented potential for sharing information, connecting people and ideas, and facilitating collaboration both within the digital world and beyond it.

Empowering people with creativity skill becomes for designers a fundamental aim and a new field of action. The research investigates the factors enhancing creativity and the impact of digital technology on these factors, providing guidelines and tools to boost creativity according to digital changes.

question

What is the role of practice-based design in relation to the soft skills required to human being to face the complexity of the digital era?

Caroline Yan Zheng

[HTTP://FEUETBOIS.NET/](http://FEUETBOIS.NET/) @_CAROLINE6868

keywords

Synthetic touch, Soft robotics, Affective communication

affiliation

Royal College of Art UK

Information Experience Design and Fashion

United Kingdom

bio

Based in London, I am a designer, maker and researcher in fashion, smart textile and interactive affective experience. I situate my research in the interdisciplinary junction of design, making, experience design, HCI and Human Robotic Interaction.

I am active in collaborative work and publication as well as community building. I develop research artefacts and toolkits for critically speculate human-machine and human-human relationships mediated by technology and robotics.

research

My PhD explores the emotive aspects of soft robotic materials and currently I am working on designing synthetic touch using soft robotic actuators for affective communication.

Emerging from a lack of connection with current 'emotionally intelligent' artefacts, and drawing from my background in fashion design and material making, I seek emotional qualities by exploring materiality and corporeal relations.

My practice works with the chosen medium of soft robotics, mainly deformable silicone actuators and connects soft robotic artefacts' kinetic behaviours to affective sensing.

I employ the mixed methods of studio practice and participatory and co-design workshops with adult participants.

Into the 3rd year, the research focuses especially on creating simulated affective touch experience with soft robotic artefacts. One specific question is on the attribution of meaning for synthetic tactile stimuli. Rather than "prescribe" meaning, I seek to design system and toolkits to facilitate users to map their own affective meaning and context out of various tactile stimuli.

I develop toolkits and host participatory design workshops to investigate this question.

The research contributes a perspective from material making and fashion to consider soft robotics and programmable corporeal interactivity as part of the new materiality for designers to create affective sensory experiences.

question

How do material practice change the way digital tools are used?

Catharina Henje

[HTTP://WWW.UID.UMU.SE](http://WWW.UID.UMU.SE)



keywords

Inclusive Design, User experience, Aesthetics of Interaction

affiliation

Umeå University

Umeå Institute of Design

Sweden

bio

After 12 years as Physiotherapy practitioner, I stepped into the world of Industrial Design and took a Bachelors in Industrial Design and a Masters in Interaction Design. Since 2006 I have been working at Umeå Institute of Design in Sweden as university lecturer, and in applied research projects with various companies. In January 2018, I enrolled as a PhLic student at the same department within the field of Inclusive Design.

research

Designing for Diversity

The starting point for my licentiate thesis is previously obtained research material from two studies within the field of Inclusive Design. The first study focused on how to make train travelling accessible, and the other on exploring the experiences of using an electric powered wheelchair in daily living.

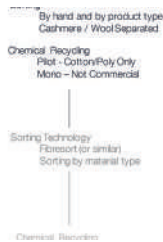
For this licentiate project, the aim is to review and deepen the analysis of the material and outcome, learning more about different design dimensions of importance for the user experience, as for emotional design aspects in usability and the area of aesthetics of interaction. The aim is also to look at Inclusive design from a holistic, sustainable viewpoint, adding perspectives of systems thinking in order to understand the complexity of the user experience as whole.

question

How to win land and credibility as equal partner in interdisciplinary research?

Cathryn Hall

WWW.ANEKATEXTILES.CO.UK/RESEARCH @CATHRYNANNEKA



keywords

Materials, Recycling, Blends

affiliation

**University of the Arts London, Chelsea College of Arts
Centre for Circular Design
United Kingdom**

bio

Trained as a knitted textile designer, Cathryn returned to research in 2016, after 4 years in industry, completing her Masters in Sustainable Textile Design at Chelsea College of Arts, with Distinction. She joined the Centre for Circular Design (CCD) as research assistant, on the Mistra Future Fashion programme. She is currently undertaking her first year of practice based doctoral study with CCD, under Dr Kate Goldsworthy and Prof Rebecca Earley.

research

MECH-MIX MATERIALS: Designing incremental blending of mixed fibres from post-consumer textile waste to enable mechanical recycling to achieve high-value materials

This research proposes a design-led approach to the development of mechanical recycling for blended materials used in incremental amounts to provide solutions for a circular economy. It addresses the limitation of both the chemical and mechanical industry's use of high-quality and mono-material inputs as the only approach to producing high-value outputs. (High-value referred to in this research means that the end application is of higher value than the current insulation materials, e.g. interiors or apparel).

Advances in post-consumer textile waste routes (consisting of any type of garment or household textile that the consumer discards) is increasingly emphasising challenges in collection, sorting and recycling. This research focuses on the end of life, to find solutions for the industry's consistent use of blended yarns, (increasingly desired for their function and price benefits), and the resultant mixed fibres, which are problematic for developments in chemical recycling (complex, expensive and slow). This research asks how systemic and repeated blending of virgin with mixed-fibre post-consumer textile waste can be utilised to create high-value materials for higher value products.

question

How can design act as a catalyst for change within an industry setting?

Con Kennedy

keywords

Entrepreneurship, Business, Framework

affiliation

**Dublin Institute of Technology
Dublin School of Creative Arts
Ireland**

bio

Con Kennedy is a Communications Design practitioner and a Lecturer at the Dublin School of Creative Arts at the Dublin Institute of Technology. Con is currently researching entrepreneurship frameworks applicable for design enterprises. He has previously authored industry reports for the Design and Crafts Council of Ireland and contributed research towards Irish Government policy on Design.

research

A likely route to employment in the communication design sector is self-employment, be that in practice or as free-lance. Communication designers form, manage, and run their design enterprises. Therefore these individuals are design entrepreneurs. Communication design is a business, and like any other type of business, these practices must make a profit to survive and grow. However, the literature on entrepreneurship and entrepreneurial theories have tended to ignore design as an enterprise. Designers have identified skill deficits that centre around entrepreneurial and business management skills, which would seem to be hindering the growth and sustainability of individual creative enterprises and the sector as a whole. However, there would seem to be a previously unconnected relationship between the entrepreneurial and design processes which may address the deficit in business skills within creative enterprises. Design entrepreneurs are different from other forms of entrepreneurs as the design entrepreneur is inextricably linked to what they do and their product offering. This paper investigates the relationship between design and entrepreneurship and proposes a design-specific entrepreneurial framework for creative enterprises.

question

How effective is practice-based design research in being a change agent for the practice of design in industry - can we go beyond theory and affect or influence positive change in design as a practice?

Daniel G. Cabrero

@UXGENTLEMAN

Danielle Arets

@DANIELLEARETS

keywords

User-Created Personas, Participatory Design, Cross-Cultural Design

affiliation

**University of West London
School of Computing and Engineering
Spain, United Kingdom, Namibia**

bio

As a researcher, and integrating User-Centred Design and Participatory Design philosophies, I am interested in the persona artefact for technology design. My PhD comprises and studies this phenomenon with four Namibian ethnic groups, i.e. ovaHerero, Ovambo, ovaHimba and Khoisan. Through this research I found a lack granted universalism in the creation of personas for intercultural representational communication purposes. This is the core line of research I wish to keep exploring.

research

Combining UCD and PD in technology design is a useful, needed move. This is visible in current social movements and political changes worldwide and the participatory support provided to them by collaborative tools such as crowdsourcing, social media, etc. Scaffolding from the UCD persona, this project proposes and has empirically investigated User-Created Personas (UCP) to support end-users' self-representations. UCPs were co-designed with ovaHerero, Ovambo, ovaHimba and Khoisan laypeople in pastoral and urban Namibia. The aim has been 3-folded: (1) to increase the scarcity of empirical persona research, particularly in locales beyond Western thought and influence; (2) to support the co-design of an Indigenous Knowledge Crowdsourcing Tool for rural communities in Namibia to preserve their knowledge for future generations, and (3) to assess the efficacy of UCPs in local and foreign designerly contexts.

Findings on how UCPs get depicted are diverse according to cultural settings co-creators belonged to; while depending on locality or foreignism, appraisers generally accepted (i.e. local) or questioned (i.e. foreign) results. This contribution to Design Science Research reveals the need to study culturally diverse populations and their representations, instead of attempting to universalise methods, tools and techniques. Such a micro-cultural stance ought to affect technology design according to nuances communicated.

question

How do you fruitfully design technology for cross-cultural communities you do not belong to and/or have not much knowledge about?

keywords

Narrative, Critical design, Journalism

affiliation

**Design Academy Eindhoven
Readership Strategic Creativity
Netherlands**

bio

Danielle is heading the research minor Crafting Narratives; a collaboration between DAE & VPRO; where she investigates technology trends and prototypes future journalism concepts.

Danielle has a background in cultural studies (Maastricht University) media studies Aarhus University).

research

In a time where tech driven innovations appear to have a somewhat dismantling effect on social, cultural and political systems, designers are being asked to extend their traditional practices and use their 'thinking through making' approach to challenge assumptions, and to design scenarios for possible outcomes, as well as to instigate meaningful debates. Whilst the role of design as a means to societal debate is already well defined by speculative design (Dunne & Raby, 2009), adversarial design (Di Salvo, 2013) or provotypes (Boer, Donovan, Buur, 2013), this research focuses on the need to define a new role which we call the design inquirer, in which the relation between design and journalism is explored.

question

In the design research process we often lead towards a process of reducing friction. By using the designers sensibility and methods to match people's needs (Brown, 2008), we try to create meaningful products that adapt to customer values and market opportunities. However one could question whether our times require a different, more vigorous design role where the frictions and tensions are not dissolved but highlighted.....I would like to discuss this with other researchers

Daphne Menheere



keywords

Constructive design research, self-enhancement, physical activity

affiliation

**Eindhoven University of Technology
Industrial Design
Netherlands**

bio

Daphne has designed a smart bra, Aymée, to research the relation between self-enhancement and physical activity among former breast cancer patients. Through this research, she realized the importance of personalized feedback, that also implements subjective measurements, when stimulating physical activity. This is the foundation of a new research direction that she is focusing on within her PhD.

research

There has been an increased popularity in unorganized sports, such as running, cycling and gym memberships. Not only has it become easier to monitor ourselves through feedback systems, such as wearables, monitoring tools and smartphone applications (Vos, 2016), these kinds of sports are also easier to combine with our dynamic and unorganized schedules as it takes little preparation to participate in. This popularity increase has many advantages but on the other hand also has a downside: more drop-out due to injuries, lack of guidance, more meaningless data through wearables, motivational loss etc.

This research is part of the Nano4Sports and will focus on designing a personalized feedback system for inexperienced female runners, who may, due to lack of guidance and support, dropout due to motivational loss. Within the research, the role of subjective measurements and feedback through self-enhancement will be explored. Is it possible, through design, to collect more than just objective data, but combine this with subjective data and personalize the feedback? And will it be possible to design a feedback system for self-enhancement and will this lead to an increased physical activity level by preventing motivational loss?

question

To what extend do we simplify complex behavior change strategies and techniques with practice-based design research? Is this a desirable and thus actionable simplification or is it an oversimplification of complex theories?

Davide Gambera



keywords

Synesthesia, Design, Wellbeing

affiliation

**IADE, Universidade Europeia
UNIDCOM/IADE
Portugal**

bio

Davide Antonio Gambera is a Ph.D candidate in IADE, Lisbon. After a Bachelor's Degree in Industrial Design at the Politecnico of Bari (2012) he enrolled at Politecnico di Milano where he graduated with a Master's Degree Thesis concerning the theme of Synesthetic Design for health and well-being (2016). Since 2017 is Ph.D candidate in IADE, where he investigates the role of sensory perceptions on people's health.

research

The main objective of this research is to assess how specific stimuli derived by the interaction with artifact, might generate phenomena of sensory interaction, able to influence the psycho-physical condition of wellbeing in three groups of users; i.e., children, adults and elders. Our attention will be therefore focused on the scientific understanding of phenomena of cross sensory interaction, known as Synesthesia, where induced stimuli and inducted sensations establish, between them, a precise relationship of cause-effect. By placing the scientific understanding of human senses as the starting point of a design process, we are going to present a new design paradigm, in order to identify new possibilities in terms of Design approach. New artifacts will be designed by taking into consideration the results from the previous phase and shall be tested in real context, i.e hospitals and healthcare facilities. Users' reactions will be assessed during a mixed experimental-field research by collecting both subjective (perceptions) and behavioral data (eye-tracking, bio-signals, facial expressions). The main outcome of this study shall be the definition on a multi-dimensional approach for a sense-based design.

question

Imagine to place our senses as the starting point of a design process: may the scientific understanding of human senses generate new possibilities in terms of design practice?

Denielle Emans

DENIELLEEMANS.COM @DENIELLE



keywords

Communication for Social Change, Migrant Rights, Communication Design

affiliation

The University of Queensland

The Centre for Communication for Social Change
Australia

bio

Denielle Emans is a designer, researcher and educator who has been teaching at the University level for over 12 years. She specializes in the area of experiential design in relation to the conceptualization, development, and execution of visual messages for social change and sustainability. Denielle is an Assistant Professor at Virginia Commonwealth University Qatar and holds a Master's degree in Graphic Design from North Carolina State University's School of Design.

research

The small peninsular country of Qatar is in the midst of rapid development despite a diplomatic embargo imposed by neighbouring Arab Gulf countries that began in June 2017. Low-income migrant workers constitute the majority of the nation's labour force and nearly 88 percent of the total population. Hailing from South and South-East Asia, more than two-thirds of labourers do not read or speak Arabic and English, the primary languages of the country's largest construction companies. There is also negligible legislation to ensure effective communication of safety information to workers with limited English/Arabic proficiency or low literacy skills. Without governmental oversight, contractors have little motivation to ameliorate worksite conditions or training programmes, let alone safety signage in translation. Addressing the role of communication on construction sites is a first step in improving workplace conditions for workers from linguistically and ethnically diverse backgrounds. This study responds by exploring the role designers can play in the provision of accessible and inclusive safety information following a research methodology involving observational data, semi-structured interviews, and practice led-enquiry. The aim is to offer a framework to operationalise social design in a context where freedom of the press and governmental restrictions remain a significant limitation.

question

What is a framework to catalyse design for social change in development spaces wherein governmental restrictions limit civic engagement?

Dion Tuckwell



keywords

Transdisciplinary, Learning, Methodology

affiliation

Monash University

Design

Australia

bio

Dion Tuckwell works in the Department of Design at Monash University as a Lecturer of Communication Design. He has a Master's Degree from the University of Melbourne Graduate School of Education and is currently pursuing doctoral studies in Design at Monash University, where his research is investigating the intersection of Design, Learning, and Teacher Change.

research

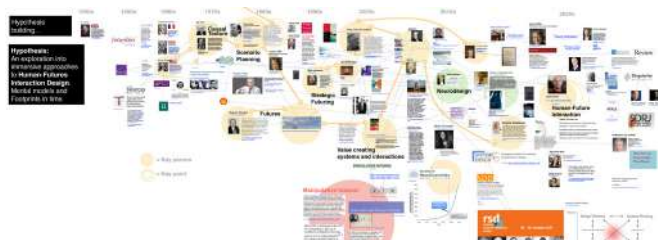
Dion's research interests derive from a transdisciplinary reappraisal of design practice. His PhD informs the Innovative Learning Environments and Teacher Change (ILETC) project, an Australian federally funded research initiative that is looking into the role of teacher agency as learning environments are redesigned and reconceptualised to suit 21st century learning. This is an ambitious and far reaching research initiative that involves the collaboration of a variety of stakeholders into the future of learning spaces, and how teachers adapt their pedagogy to new thinking around the technology of spatial configuration. As one of 9 PhD's on this project, and the only design-led PhD, Dion aims to study the role and agency of design as it veers alongside this type of complex problem. As traditional disciplinary boundaries shift and dissolve, Dion's research investigates how design is expertly placed to convene generative conversations by a diverse array of stakeholders like those found on the ILETC project. This re-positioning of design expertise concerns design's capacity to transform existing circumstances into preferred ones, and it is the potential of this intervention that has primed Dion's research interests.

question

How could design methods, alongside the methodological adjacency of transdisciplinary design research, be a catalyst for transformative change?

Duncan Brown

[@DETYRO](http://www.designbrown.com)



keywords

Strategy, Futures, Narratives

affiliation

Loughborough University
School of Design
United Kingdom

bio

Duncan operates at the intersection of design/strategy. A designer/maker happily shifting from casting in concrete to creating new products and business strategies for some of the world's largest organisations. Duncan is a sensemaker and synthesiser and enjoys taking a problem and turning it into a future opportunity. Keep him away from empty walls because as a reformed graffiti artist he will now moderately cover it in sticky notes.

research

Decision Centred Design

In business there are 'good' decisions and there are 'bad' decisions.

A bad strategy can lead to the collapse of corporations or worse. Are these collapses because of bad decisions or because of the biases and beliefs of the parties involved in making the decisions?

How can the application of design within the decision making process ensure more 'good' decisions are made, target biases by design and create more successful strategies?

I aim to address these issues by applying a combination of approaches from design thinking, design futures and scenario design, demonstrated through a scientific approach to lab and/or field studies.

My approach has novelty in the field of decision theory because it brings the application of design approaches and a focus on consciously designing FOR decisions within the context of strategic corporate decisions.

question

How might design influence corporate strategy to make a humane and holistic future more plausible?

Erik Sandelin

[HTTP://WWW.UNSWORN.ORG](http://www.unsworn.org) @SNAWBEL



keywords

Human-decentered, Codesign, Biotechnology

affiliation

Konstfack University of Arts, Crafts and Design
Art, Technology and Design
Sweden

bio

I have an MA in Interaction Design from Malmö University. Before returning to academia I co-founded and ran interaction design and innovation studio Unsworn Industries for almost ten years. We crafted beautiful action spaces, from childrens' libraries to mountain megaphones and gluten E.T. barbecues.

research

As a PhD candidate at the interdisciplinary programme Art, Technology and Design – a joint initiative of the Royal Institute of Technology (KTH) and Konstfack University of Arts, Crafts and Design in Stockholm – I work in the messy intersections of codesign, posthuman theory, biotechnology and critical animal studies, under the project heading *Living Things: Design beyond Human Exceptionalism*.

My research interests center on designerly interventions in the intimate entanglements of human and nonhuman lives mediated through digital, biological, and other technologies. How can we design with, and for, non-human subjects? How can designers prototype, make tangible, posthuman everyday life? What could a non-anthropocentric design practice be like?

question

How can we put designerly skills to use in making manifest new relations with our fellow critters – creating props for trying out, rehearsing, and discussing less anthropocentric futures?

Fanny Giordano

[HTTP://WWW.FANNYGIORDANO.COM](http://www.fannygiordano.com)



keywords

Public services, Service design, Citizen participation

affiliation

Aalborg University in Copenhagen
Architecture, Design & Media Technology
Denmark

bio

Fanny is a French designer working and researching at the intersection of service design, participatory design and social innovation. Since August 2016 she has been part of the Service Design Lab at Aalborg University in Copenhagen (AAU-CPH) Denmark, first as a research assistant and since February 2017 as a PhD Fellow. The final PhD hand-in is planned for January 2020.

research

The starting point of this PhD study is the issue that innovation in the public sector is generally approached through technological acceleration and cut in human resources which has resulted in impoverishing service offering and put the citizens who depend the most on these services into difficult situations. In this context, the overall question explored is how might designers contribute to close the gap between citizens' needs and public service offering?

The aim of this research is to highlight opportunities for designers to make the citizen's perspectives truly influential when public services are (re)designed and to propose new methodologies, strategies and tools for achieving this goal.

This research is addressed by a service designer using research through design. Various projects are used as playground for experimentation and as sources of empirical data:

- Open4citizens: funded under the Horizon2020 Research and Innovation Programme from the Service Design Lab at Aalborg University in Copenhagen.
- Bonjour Genève: project in collaboration with a public institution providing social care to refugees in Geneva.
- Innovation Huset: innovation unit attached to Copenhagen municipality. Project to be defined.
- DESIS Lab in Parsons School NY: Six months collaboration from January 2019. Project to be defined.

question

How might design researchers pave the way for design to impact in the formal policy realm?

Fiona J. MacLellan

[HTTP://OPENSCHOOL.CO](http://openschool.co) @FIABC

keywords

Social Design, Educational Futures, Civic Imagination

affiliation

Glasgow School of Art
School of Innovation
Scotland

bio

Fiona J. MacLellan is a designer and researcher based in the Outer Hebrides. She is currently undertaking a practice-led PhD exploring emerging phenomena through collectively built futures. Her current project questions the status quo in educational reform for island communities through the lens of design. Project partners include Glasgow School of Art, Highlands and Islands Enterprise, Comhairle nan Eilean Siar, Scotland's Futures Forum and Centre for Contemporary Arts.

research

As the role of design in the public sector grows so do the questions of what design has to offer when facing challenges at a societal level. In particular this study seeks to illuminate the need for social dreaming amidst civic society, doing so through a practice-led PhD study which explores the futures of mainstream education from the peripheries. Over two years of ethnographic research and participatory design workshops with schools the study asks: How can learners and teachers in the Outer Hebrides participate in designing educational futures?

In order to disseminate responses to this question The Open School Network was founded in 2017. It hosts future-focused conversations online and in public spaces across Scotland, bringing about collective and creative questioning of topics including: school rationalisation, contemporary views of rurality, agency through design, representation, community engagement, and the role of the user in affecting systems level change. Thus, the platform for civic imagination is shedding light on the economic and societal impact of educational reform on the island communities off the north-west coast of Scotland. More widely this propagates ideals around the sustainability of remote ways of living and systems of supporting diversity in geographies through the lens of design.

question

How might we best measure the impact of design research in affecting long term change?

Francesca Bozza

[@ARCHFRANCESCABOZZA](http://ARCHFRANCESCABOZZA.WIXSITE.COM/SUSTAINABILITYART)



keywords

Sensible experience, Community involvements, Walkable map

affiliation

Sapienza, Università di Roma

Department of Architecture and Project
Italy

bio

ARCHITECT | Master Degree at “Sapienza”_Università di Roma. Erasmus experience at BTU_Cottbus, Germany (2011-12). Work Experience with architecture firms in Belgium on Inclusive Projects and Restoration of Heritage Buildings (2014 to 2016). Since 2015 she collaborates with public Administrations on International Relations and on architectural barriers overcome and inclusive routes within Regional Planning. Ph.D. STUDENT | Research Experience at KU_LEUVEN Belgium, 2014-15. Since 2016 she's Phd Student at DIAP_”La Sapienza”.

research

Design for sensible experience. Accessible historical itineraries that facilitate the multisensory perception, designed with Rome citizens, is a Research Project based on an agreement with a public administration, the Municipality. It deepens objectives, tools and methods of a design sensitive to the “human parameter” and it's finalized to the acquisition of ‘participatory process’ to get citizen involved in the Design Process of outdoor archaeological paths, heritage sites, adaptive-ergonomics urban furnishings and sustainable mobility. The range of city_users involved are people with special needs or users with disabilities; thanks to a dedicated platform and a help desk at Municipality offices, they can:

- 1.Fill out an assessment questionnaire about the accessibility level of the city heritage sites;
- 2.Apply to participate at ‘cultural promenades’ through heritage sites, organized within the research project;The presentation will show questionnaire templates, pictures, videos, interviews, experiences, impressions and report emotions of citizen.

Research Outcomes:

- 1.Multilayer map: an users friendly Rome walkable map; Subjectively perceptions are “decrypted” and connected as “mental topographies” to create a new map layer, an ‘emotional map’.
- 2.Website: Annotated maps show city accessible routes.
3. An archaeological paths Inclusive Design proposal.

Research developments: 1.Open_walkable map source, 2.Accessibility performance certification, 3.Guideline for an empathetic Project Design

question

Design expresses the contemporary but desires the future. It can represent people dreams and emotions, something that doesn't exist yet, but that lives in the future. Research is the tools to reach it, it aims to the change. Research has the possibility to have a direct comparison with the users of the design project: they are the “experts” of the space; research allows the voice of the few to be heard by many...

**Is Experiencing the design the new design research frontier?
Can users emotions be the object of the research design, to obtain a change (as the Environmental Psychology sustains)?**

Francis Carter

[HTTP://FRANCISCARTER.NET](http://FRANCISCARTER.NET)



keywords

Behavior, Practice, Sustainability

affiliation

Carnegie Mellon University

School of Design
United States

bio

Drawing from my work around designing for healthy food access to low income communities and my practice of placemaking and tactical urbanism, my research looks at the sustainability of our everyday lives. By looking specifically at the social-technical relationship we have to our daily habits we can deconstruct practices and redirect them toward more conscious and informed routines which have regenerative implications for the individual and the planet.

research

My research takes place in the south Bronx community of Hunts Point, New York. Working with a local non-profit healthcare provider, I develop projects with the community they are a part of and actively serve which highlight and promote healthy lifestyle behaviors throughout their clinics and the greater neighborhood. Developing targeted design interventions which reflect the local culture of the community, I seek to make individuals more conscious of their daily habits and the impact they have on their lives and personal health. I do this by working with various departments within the non-profit to collaboratively design innovative healthcare solutions that expand the scope of their mission of providing holistic healthcare to traditionally underserved urban populations.

The larger goal of my work is to develop design patterns for transitioning behaviors toward more sustainable ways of living and being in the world. Taking a practice-based approach, I posit design interventions in physical spaces as provocations which illicit observable behavioral feedback for analysis. It is my hope to synthesize my findings to create a pattern library or a collection of best practices for designing for behavior change.

question

How can we show evidence of the impact of our practice-based work has on individuals lives that reflects behavior change over an extended period of time?

Georgina Nadal



keywords

Emotional attachment, Coding, Woven textiles

affiliation

Manchester Metropolitan University

Design

United Kingdom

bio

Although my research career has just begun, I have developed a strong research foundation that is helping to ensure my success as a Ph.D. student. Over the last eight years, I have gained varied undergraduate and postgraduate research experiences in two areas of design practice: the incorporation of new technology in traditional procedures and the incorporation of the emotional value in the process of weaving textile.

research

RQ: Weaving with code: How can emotional attachment be designed into woven textiles using coding?

The research explores the translation of emotional attachment into the practice of woven textiles. It examines human responses to coding and the mechanical production of weaving on digital jacquard looms.

Theorists and psychologists have focused on the connections between design and the emotional attachment elicited through the often sentimental association one feels towards an object. In contemporary design debate, the role of emotion in design has adopted an important position. However, there appears to be limited research on the connection between textiles and their emotional attachment.

The research aims to bring an advance understanding of how emotional attachment is represented in the practice of woven textiles. Moreover, it challenges existing textile boundaries by incorporating novel approaches to digital coding in the practice of woven textiles; and, it promotes emotional attachment in visual forms and material production developed from digital coding. Finally, the investigation is conducted as practice-led research, where the new understandings about the emotional attachment into woven textiles are lead primarily by the research."

question

How can we, as design researchers, bring and adapt the methods used in practice-based design research to the business field in order to reduce inefficient and emotionally unattached products for a more sustainable world?

Gwen Lettis

[@GWENLETTIS](#)



keywords

Design, Education, Responsibility

affiliation

Cork Institute of Technology/University of Limerick

Media Communications/School of Design

Ireland

bio

Gwen Lettis is a Lecturer in the Media Communications Department, Cork Institute of Technology. Presently, she is the Year 4 Coordinator of the Visual Communication Degree. She is also a PhD candidate in University of Limerick.

Gwen is interested in design education, education for sustainable development, design thinking and leadership. Her PhD work explores how best to nurture responsible designers through the integration of students' personal values into their work processes.

research

Through a series of iterative projects the researcher is developing a process whereby students clarify, integrate and enact their values through Graphic Communication Design. The researcher suggests that when values are integrated and enacted upon, responsible design becomes intrinsic to practice. The notion of ethical and humanistic values driving design (AIGA, 2017, p6) becomes practical rather than notional.

The publication "AIGA Designer 2025" describes the need for competency in values, with a section titled "Core values matter". It states:

People connect emotionally with stories that are authentic reflections of an organizations' ethos and show loyalty over time when ethical and humanistic values drive all aspects of operations. (AIGA, 2017, p6).

Graphic communication design graduates need to understand how people and organizations connect through common values, so they can visually communicate those values to both audiences. Understanding how to use their values can facilitate this. More importantly however, it can facilitate the development of a student's ethical identity, which can lead to responsible design. Benson and Napier (2012) explain that when individuals and teams bring their personal values to the design process, they can shape how they view problems or opportunities. This activity can help change perspectives to more holistic ones, but can also change behaviours, methods and inquiry to ensure design decisions are responsible.

The developing process is built upon research in the areas of design education and practice, education for sustainable development, psychology and behaviour development.

question

How can proven educational methods have further impact in the professional reality of Graphic Communication Design?

Ilze Loza

keywords

Advertising, Western/Islamic culture, Globalization

affiliation

Art Academy of Latvia

History of Arts

Latvia

bio

Ilze Loza is currently a Ph.D. candidate in Arts History at Arts Academy of Latvia. Ilze graduated B.Sc. in Graphic Design from International Higher School of Practical Psychology in 2006. She obtained MFA in Fine Arts - Visual Communication department from Arts Academy of Latvia in 2010. General research area is Graphic design and Visual Communication. Her research interests include advertising strategies, globalization processes and visual communication.

research

Research analyzes the ethics and values of visual communication strategies in European advertisements made by Western and Islamic cultures in the 21st century, as well as ethical considerations when dealing with Islamic audiences. Emphasis is placed on ad design and the differences in design ethics. The values, design ethics and failures of visual communication and advertising between the East and the West are also reflected upon. Research considers the impacts and failures of ads not only as theoretical and practical artistic research, but as practices of visual communication and advertising strategies. It explores the shifting functions of artistic graphic design practices and theoretical research in creating successful visual communication. Ideas of strategy-building systems between the design ethics of the Western world and those of the Middle East are also compared and analyzed. Interaction of globalization and culture in Europe, communication and collisions.

question

Advertisement design in 21st century has impact on mass culture as theoretical and practical artistic manifestation of visual communication dealing with Islamic culture in Europe and vice versa?

Ines P. Junge

keywords

Sustainability, ICT, Design

affiliation

University of Oslo

Informatics

Norway

bio

Master in Industrial Design Engineering from University of Technology Dresden/Germany, 2009; Research engineer at University of Technology Berlin/Germany within a Virtual Lenticular Rendering - project (2009-2010) and research assistant at Technologiestiftung Berlin/Germany, author to a study about Smart Surfaces and Thinfilm Technologies (2010-2013); Freelance designer and EdTech-entrepreneur in Oslo/Norway, now PhD-candidate at University of Oslo in Sustainable Technology Design (Section Digital Entrepreneurship)

research

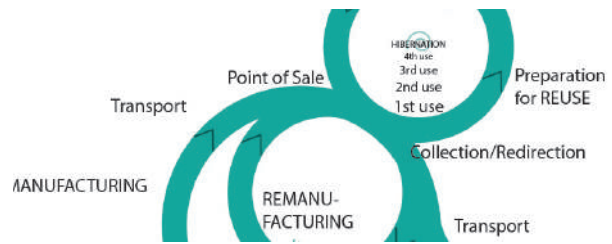
My PhD project examines and focuses on the use-phase close to the end-of-life in the lifecycle of electronics and asks with that for implications for the design and production phase. The main objective is to better understand the phenomenon

obsolescence of electronic consumer goods - may it concern planned or perceived obsolescence. Studying electronic consumer goods - such as mobile phones, and other digital devices - shall reveal the sustainability challenges involved. It is the purpose of the project to link end-of-use with invention (design) and promote designing according to the perspective of sustainability, for effective circularity, for end-of-waste and end of resource hibernation.

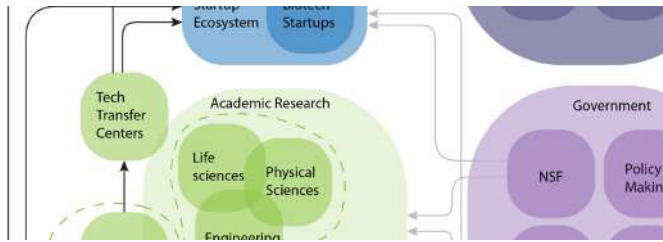
In a participatory design manner, I want to organize co-creative workshops. These sessions shall focus on how to make longevity of products in Human-Computer-Interaction possible, how to promote emotional durability (consumer attachment), after securing that both material-wise, functional, economic and psychological obsolescence are pushed (delayed) beyond nowadays time limits.

question

How can practice-based design research (good ideas from maybe unknown researchers) have greater impact, without necessarily gaining a "critical" or "activist" image?



Irem Tekogul



keywords

Biotechnology, Future-making, Speculative design

affiliation

Illinois Institute of Technology
Institute of Design
USA

bio

I am conducting my PhD research in Design at the Institute of Design, Illinois Institute of Technology as a Fulbright grantee. My research explores the role of design in contextualizing emerging biotechnologies. I hold an MA in Product Design from NABA Milano and a BSc in Industrial Product Design from Istanbul Technical University.

research

Biotechnology, usually referred to as the dominant technology of our century, is poised to catalyze change in not only science and industry but also in the wider society. Engineered living systems are increasingly being utilized as microbial factories to solve complex problems related to food, energy, health, and materials. Designing living organisms and designing with them enable designers to engage with future-making through the manipulation of life. My PhD research seeks to explore the mutually constitutive relationship between design and emerging biotechnologies. I intend to examine how the outcomes of this relationship influence both design research and scientific research. Moreover, I also aim to study the role of design practice in investigating social, cultural and ethical implications of the advents in biotechnology by creating artifacts, scenarios, and narratives that engage the wider society in future-making process.

question

How can design practice engage with emerging technologies for future-making?

Jack Champ

[HTTP://WWW.RECOVERYBYDESIGN.INFO](http://www.recoverybydesign.info) @ JACKJCHAMP



keywords

Recovery, Creativity, Toolkit

affiliation

Kingston University London
Kingston School of Art
England

bio

PhD researcher interested in using design methods to innovate in the field of substance misuse and prototype tools which place creativity at the centre of recovery journeys. Currently co-design workshops are being undertaken with support service users at several stages of recovery in Brighton. During 2017 a conference with the theme 'Designing Participation' was organised, to bring together a wide variety of creative recovery and support organisations to discuss best practice.

research

This research explores the use of design tools to co-produce work with individuals suffering from severe addiction issues. The aim is to use creative research activities directly with service users to facilitate discoveries on how individual recovery journeys might be supported and developed.

Data produced from an initial pilot of eight service users uncovered the presence of therapeutic value for the participants who were undertaking the activities. They expressed that whilst challenging, completing the tasks was an enjoyable and engaging exercise, which helped them see where their addiction had previously taken them.

This pilot highlighted an opportunity to develop a 'Creative Recovery Kit', which could sow the seed of creativity in a structured treatment setting during early recovery. This tool may then assist in the building of creative confidence and recovery capital, which would allow a smoother pathway out of addiction and reduce the chance of relapse. Encouraging and empowering participants to develop new ways of being creative and embracing their recovery in the local community.

question

How can we overcome traditional conceptions of the design discipline to quickly and effectively communicate the value of design research to potential collaborators out in 'the field'?

Jana Thierfelder

keywords

Science and Technology Studies, Ethnography, Transdisciplinarity

affiliation

**University of Berne
Faculty of Humanities
Switzerland**

bio

Jana Thierfelder studied Design (BA) and Transdisciplinarity (MA). Her research focuses on the interfaces between Science and Technology Studies and Design Research. Since 2013 Jana Thierfelder has been conducting field and laboratory studies with biologists. Since 2017 she is a PhD candidate at the Graduate School of the Arts, University of Berne. In addition, Jana Thierfelder has been working as a lecturer and research associate for the Zurich University of the Arts.

research

From a design perspective, scientific field records are relevant research objects that provide information about the epistemic potential of design. Non-phonetic tools such as drawing, sketching and notations are cultural techniques, in which designers have received specific training and which scientists usually employ intuitively, i.e. without conscious reflection of the associated formal implications and without specific guidance. These tools help to store, transport and collect observations, but also to think “with eyes and hands” (Bruno Latour). According to Latour, they form “chains of references” in which they serve as epistemic co-actors of research. However, in the course of research they undergo a transformation in which they lose their qualitative-subjective characteristics in order to meet scientific image conventions. It seems, that the employment of visualization practices migrates from a cognitive-epistemological interest, as illustrated by the raw field notes, towards an affirmation of a specific research culture that suggests objectivity and standardizability and thus is paradigmatic.

The topic of scientific notation is central in the field of STS, but has been granted only little attention within design research. Hence, the project aims to focus on the implications and the potential of design as a research method within the natural sciences.

question

What insights can be gained about the processes of scientific knowledge production when looking at them from the perspective of design and how can this potentially change the predominant perception of and attitude towards the scientific apparatus, internally as well as externally?

Johanna Oehlmann



keywords

Design entrepreneurship, Value creation processes, Sustain-ability conceptions

affiliation

**Nottingham Trent Business School & Copenhagen Business School
*Responsible and Sustainable Business Lab & Management
Politics and Philosophy*
United Kingdom and Denmark**

bio

2014-present: ethnographic participatory research on design-driven methods and processes of public and corporate incubation creation.

2015-2016: MA “The Good, the New, the Beautiful. An Exploration of Danish Design Chair Biographies: Creation and Multiplication of Meaning and Value” as a qualitative processual investigation on notions of the “good” in good design.

2017-present: qualitative research on upcycling design “The making of values: Exploring what motivates upcycling as sustainable work practice” at EGOS conference 2018.

2014-present: Design thinking workshop facilitations (method training, strategy and organisation development).

research

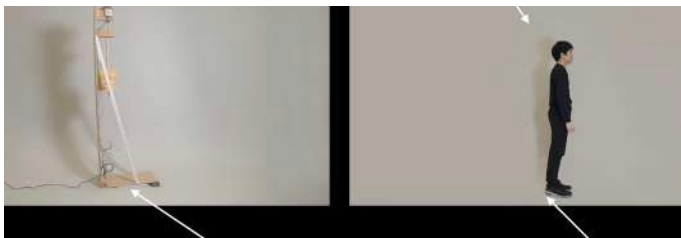
The PhD research explores and proposes new models of value creation through Sustainable Design Entrepreneurship (SDE). Taking value creation as the common ground, it thereby sets the concepts of (1) sustainability and sustainable development, (2) design and (3) entrepreneurship in relation to each other. The initiation of such conversation between sustainability, designing and entrepreneuring aims at understanding, modelling and realising processes of design entrepreneuring as alternative socio-material practices, realising value towards sustaining humane and hospitable futures. Thereby it moves towards finding alternative socio-cultural conceptions of “sustain-ability”. The methodological practice may be seen as a “bricolage” grounded on constructivist, critical and pragmatic notions. Building on the nature of the studied phenomenon, value creation and realisation need to be investigated empirically in-situ, its context and over time. The research is designed to create respective new knowledge based on participatory mixed-method ethnography and analysis of the visions, principles, work methods, and situated (narrative) practices of two design entrepreneurial organisations, embedded in their socio-economic context (London). New paths and forms of (materialised) value will be proposed in situational context.

question

Which role can I, as practice-based design researcher, play in the creation of new forms of sustainable value?

Kensho Miyoshi

MIYOSHIKENSHO.COM @KENSHOMIYOSHI



keywords

Kinetic design, Kinesthetic empathy, Interaction design

affiliation

Royal College of Art

Innovation Design Engineering, School of Design Research
United Kingdom

bio

Kensho is a designer and researcher who holds MEng in Aeronautics and Astronautics from the University of Tokyo. His art and design works embrace the element of physical movement as the core of their aesthetics. For his PhD at the RCA, he develops the pervasive interest underlying his prior works in both technological and creative domains, concentrating on the aesthetic and empathic potential of movement in the context of design.

research

My PhD research explores the potential use of kinesthetic empathy in the context of design. While physical movements of designed objects are often associated with their functions, the quality of such movements, or how the movements 'feel like' is also important in design. The concept of kinesthetic empathy, which is our innate capacity to feel the kinetic sensation of observed movements, has been mainly researched in the context of the arts within studies of human movement in dance and theatre. I apply this concept to the perception of kinetic objects with the aim of revealing the relationship between object movements and our embodied and empathic response. This element is often neglected in the discussion around the potential of kinetic objects in design as well as technology-based domains like human-computer interaction, but it is expected to open a new perspective on our embodied and visceral response to dynamic objects and environments. My research started by contextualising the related theories and concepts then conducted my empirical study through making, observation and reflection, which informs the original framework of the kinesthetic and embodied aspects of movement in the context of design.

question

How would the development of practice-based design research culture change the format of academic conferences?

Laetitia Forst



keywords

Textile design, Circular economy, Design for disassembly

affiliation

University of the Arts London

Centre for Circular Design
United Kingdom

bio

Laetitia Forst is a multi-technique textile designer trained at ENSAD Paris. Her practice explores the tension between technical challenges and creativity in sustainable design for textiles. Her current PhD research at the Centre for Circular Design at the University of the Arts London, focuses on the use of design for disassembly concepts, borrowed from various fields, in developing creative approaches to textiles in the circular economy.

research

To achieve efficient recovery and recycling of textiles, resources must be used according to the criteria of distinct technical and biological cycles. However, blended materials which make up a large proportion of textiles combine these two cycles in ways that make the recovery of either resource economically and environmentally unsustainable.

This ongoing research project 'Textiles for Disassembly: how can design practice create models for disassembly for textiles in the circular economy?' explores the role of design practice, and specifically making, in developing alternatives to non-recyclable blends. Taking on a pro-active approach to circular design, this project aims at redesigning blends with end-of-life in mind from the outset by allowing the mono-material resources to be recovered through disassembly.

Drawing on sources from various fields, the designer acts as a translator regarding both the assessment of the issues and the existing approaches to solutions. This approach is first explored in an 'understanding' phase. To make the information regarding blends and recycling flows available to a design-led approach, various takes on information visualisation and understanding through making were explored. This was then followed by studio-based material experimentation in which the tacit knowledge inherent to textile design is made apparent and available for assessment.

question

How can textile design experimentation lead to new ways of approaching the creation of blends for a circular economy?

Laura Gottlieb



keywords

Reflective Practice, Creative visual tools, Boundary objects

affiliation

Mälardalen University

School of Innovation, Design and Engineering
Sweden

bio

After completing a Bachelor degree in Philosophy, Laura entered the field of Design Research. She has Masters degree in Information Experience Design from the Royal College of Art, London and has worked as a research designer at The Interactive Institute in Sweden, and Peking Natural Science-art Organization in China. For the last year she has worked on the setting up of a Living Lab at Mälardalen University, Sweden, where she is currently doing her PhD.

research

This PhD project explores the use of creative visual tools and methods from Participatory Design to support practices of co-production- the close collaboration between university and society (industry and municipality) to co-create knowledge. The PhD take a design-oriented approach and aims to develop reflective practice to understand and develop methods for co-production. This focuses on dialogue-based inquiry, particularly on democratic dialogue, to develop relational aspects and facilitate shared understanding between participants from different communities of practice and knowledge horizons.

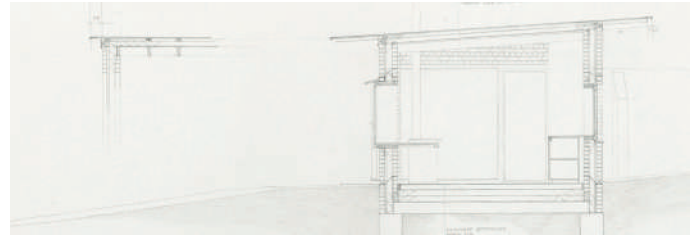
Central notions explored in the development of the tools and methods for co-production are: playful triggers (Loi), thinking-through-objects (Papert), boundary objects (Star), and metaphors. Developing creative visual tools and methods for co-production aims to contribute to the practice of inquiry and competence in co-production. This also aims to contribute theoretically the field of Design Research by understanding the benefits and hindrances of using creative visual tools with cross-sectorial partners in processes of co-production.

question

How can design contribute to the development of reflective practice in co-production to support cross-sectorial collaborations and knowledge co-creation?

Louise De Brabander

[HTTP://THEDRAWINGANDTHESPACE.INFO/TYPE/FRAGILE-LANDSCAPES/](http://thedrawingandthespace.info/type/fragile-landscapes/)



keywords

Fragile topographies, Analogue drawing, Speculative architectural designs

affiliation

KU Leuven University

Faculty of Architecture
Belgium

bio

Louise De Brabander is an early career researcher and a member of the research group The Drawing and The Space. She is currently working on the Ph.D. project: "Sacred Grounds: Drawing methods to generate alternative typologies and added value for fragile topographies." This is an ongoing research that is based on the fundamentals of previous research that was established in 2017 as part of a Master Dissertation project.

research

Architectural practice seems to be under a moratorium on building in fragile topographies and hesitating to critically question this moratorium. It is often expected that these topographies—natural or cultural landscapes, urban areas or cultural heritage—are left untouched. This research is banking on the belief that architecture has a strong potential to add cultural value to these topographies. In a first research case, located in one of the few remaining dune areas alongside the Belgian Coastline, this added value has been investigated (De Brabander, Lagrange en Van Den Berghe 2017) so as to critically question this moratorium. Walking, writing and especially drawing are the main research actions in this research case. Through developing speculative design propositions in new research cases, the potential of architectural interventions in fragile topographies is further investigated. It does so through analogue drawing and more specifically through the application of drawing techniques borrowed from archaeology and the vertical section. Without wanting to annihilate other (digital) drawing techniques, a sequential application of these analogue techniques further develops innovative types of architectural drawing, e.g. Critical Sequential Drawing (CSD) (Van Den Berghe, Sanders en Luyten 2018).

question

How can the often speculative, reflective and subjective characteristics of design based research projects be transformed into an autonomous substantial output?

Marguerite Benony

[HTTP://CARGOCOLLECTIVE.COM/MARGUERITEBENONY](http://cargocollective.com/margueritebenony)

keywords

Laboratory, Biology, Anthropology

affiliation

Université Paris Diderot

Physics

France

bio

Marguerite is an Industrial Designer, working at the edge of Design and Biology. After graduating in Design at Ecole Boulle, she did the Master « Interdisciplinary Approaches of Life Sciences » at the CRI, in Paris. She won several prizes at the synthetic biology competition iGEM and studied for 6 month at the MIT Media Lab. In 2015 she started a Ph.D that questions the future of research practice in Biology.

research

The thematic core of my research concerns the research laboratory in life sciences and its place in the contemporary social and scientific environment. Through empirical observations and prospective extrapolations, I am exploring the materiality of scientific practices, and their futures.

By doing an ethnographic study of the trajectory of ordinary scientific tools, their uses and the discourses they elicit, I aim to make an inventory of research practices in the life sciences.

This material will be assembled in an object that reconstructs the whole organization of the laboratory : for an introduction to the world of scientific objects and their discourses.

This summary inventory will enable me to objectify the plethora of tools which make up the ordinary or the extraordinary of the researchers's life, more numerous and more diverse than what we can think of and that reflect the complexity of their practice.

By offering a system of interpretation for the understanding of the functioning of a research laboratory, we give the possibility to take into account the cooperations, through language and usage, of the role of the objects and spaces for the production of knowledge, with the perspective of providing a forward-looking vision of tomorrow's research laboratory.

question

What influence does practice-based design research has for other research fields such as Physics or Biology?

Maria Mullane

[WWW.DESIGNPOSE.COM](http://www.designpose.com) [@MULLANE_MARIA](https://twitter.com/mullane_maria)



keywords

Process, Therapy, Change

affiliation

UAL University of The Arts London College of Fashion

Product Design

United Kingdom

bio

Capability Extension - of self and ones environment”” is what design means to me. With over 13 years experience as a researcher and material technologist, I am passionate about the design process over product and have worked on the R&D of protective wearable biomechanical goods for both The Disability Community and The Aged Market.

Awarded the 2017 Global Disability Innovation Hub Scholarship to develop & validate my MA research findings from Edinburgh College of Art (2013) I am currently doing a practise based PhD alongside lecturing in Product Design at Edinburgh Napier University. (BDes MA Distinction).

research

Study Title: Facilitating “”Design Thinking”” as a proximal therapeutic modality through the hybridisation of design and occupational therapy.

Research Questions: We have Art Therapy, Music therapy, Occupational Therapy....why not Design Therapy? Can a form of “”Design Thinking”” be prescribed as a multidisciplinary processing intervention? Are Designer and occupational therapist both purposeful activity facilitators? Together, can they address key healthcare service issues through a more specific design practice or professional?

This research study aims to develop and test a form of “”design thinking”” that can be prescribed within the AHP (Allied healthcare Professionals Therapeutic Framework or socio-medical model of care. To do so, The creative model of OT The Kawa Model will be tests alongside standardised models of care in order to propose and hopefully prove a form of design that can be prescribed.

Long term Mission: To turn “”Design Thinking”” on its head and validate Design Therapy as a discipline- The future of Design Thinking as a prescribed Design Service.

Purposeful activity facilitation within the socio-medical model of care. Moving beyond making meaning towards a prescribed think-design service to aid the processing of change for individuals and organisations.

question

The practice of design is essentially an experience, can this experience or process of design be therapeutic and therefore be prescribed as a catalyst for change? My PhD study aims to answer this not only to benefit the Allied healthcare Professionals and their service users but in elevating the value of design as a process for change over product.

Maria Murray

[HTTP://WWW.UCC.IE/EN/APSYCH/](http://www.ucc.ie/en/apsych/)



keywords

Community, Resilience, Digital

affiliation

University College Cork

School of Applied Psychology

Ireland

bio

Maria Murray is a PhD candidate at the School of Applied Psychology, UCC, Ireland in the People & Technology research group. She is nearing the end of her 1st year of a 5-year program, supervised by Dr. Nadia Pantidi and Dr. Trevor Hogan. Maria also lectures on the Creative Digital Media course in Cork Institute of Technology and has a background in both commercial digital design and art and design education.

research

My PhD investigates the role of digital media in creative placemaking with the aim of supporting community resilience in rapidly developing rural communities.

I plan to investigate;

- Challenges faced by rural communities as a result of rapid expansion; and strengths identified in addressing and adapting to these challenges.

- How these communities define resilience and other key concepts.

- What creative placemaking using digital technologies might look like in a rural context and the related processes and strategies appropriate for these communities.

- How to equitably engage the community in initiatives exploring challenges, and strengths and outputting digital media artefacts in order to support community resilience.

My objectives include;

- Completing a literature review examining the state of the art of; the impact of rapid expansion on rural communities, challenges and strengths unique to these regions, community resilience and creative placemaking in these contexts and the role played by digital media.

- Undertaking qualitative research with community representatives to identify challenges to, and strengths of the community.

- Engaging a diverse range of participants in workshops exploring key themes and developing digital media artefacts in response to these themes.

- Producing guidelines in the initiation, facilitation and dissemination of results from thematic digital media workshops.

question

What role can design processes and creative digital media play in supporting rural communities to develop community resilience in response to challenges related to rapid expansion?

Mariam Asad

[HTTP://NOTMIRIAM.COM](http://notmariam.com) @MARIAMNOTMIRIAM



keywords

Activism, Design, Civics

affiliation

Georgia Institute of Technology

Digital Media

USA

bio

Mariam Asad is a researcher, ethnographer, and designer who has done participation action research with grassroots and activist communities in Atlanta to learn how social computing is used in service of radical political work, such as economic, racial, and criminal justice. Past work has included digitally supported city planning, collective organizing through digital tools, and brief stints in industry at Facebook and MailChimp.

research

Radical communities in Atlanta do catalyzing and important political work using myriad digital tools and platforms, but these tools are typically not designed for that work. Activists organize and mobilize to move towards more progressive and liberatory futures, guided by values such as equity and cooperation. However, the digital tools they use espouse fundamentally different values, such as exploitation and profit-generation. My research acknowledges this tension and asks how we might design tools that identify and articulate the alternative political future that activists envision, and also how we might actively move towards it and help bring it into being.

Drawing from anarchist literature and praxis, I ask how we might rethink our commitments to justice in our academic work through the lens of prefigurative design, which focuses on socially and materially just research practices to manifest a more just future. Prefigurative design asks us to envision an alternative future, to act in the present to move towards that future, and to orient our work to build up counter structures to respond to institutional injustice. My work asks how digital tools currently facilitate-- or not-- activist practices and how we might better support radical work through research design.

question

How might we use digital tools to facilitate social change without imposing the hegemonic oppressive values that underlie the production of those same tools?

Marion Lean

WWW.MARIONLEAN.CO.UK @MARISTOTLE



keywords

Textiles, Wicked Problems

affiliation

Royal College of Art

Design Research (Textiles)

United Kingdom

bio

I am a Scottish design researcher, (and runner) based in London. My research aims to identify a role for textile designers and 'textile thinking' within interdisciplinary collaboration, in particular public health intervention. I have recently contributed to the development of wearable technologies for Alzheimer's research with Imperial College Dept of Neurotechnology, wearable digital presence devices with Little Riot, and Thames and Hudson publication 'Biomimicry for Designers' (2016) as well as public engagement projects with British Council, Scottish Cancer Prevention Network and Medical Research Council.

research

My practice based research investigates issues around physical inactivity using textile thinking and participatory design methods. Digital sensors, data physicalisation and 'human sensemaking' are used to map and analyse triggers for emotion and affect during physical activity towards an increased understanding of the role of materiality to interpret personal conversations with our own everyday personal health data.

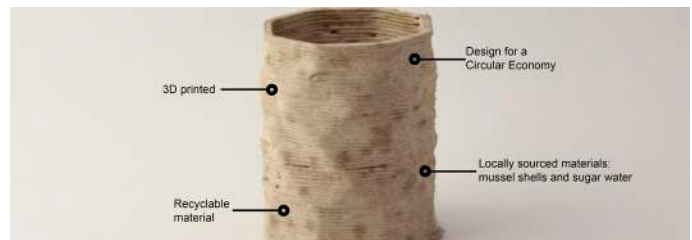
The tacit knowledge and intuition embedded in the thinking and making of textile practice methodologies have rarely been documented; it cannot be coherently put into words. Textile designing and thinking as an accepted form and process of knowledge generation still struggles to be acknowledged. Igoo (2013) identified the research, development, output and individual ontologies surrounding the domain of textile design as 'textile thinking', aimed at contesting the position of textile design as a discipline within design research. I am developing a hypothesis which might be tested, repeated and proven intended for quantifying the impact of textile thinking towards a more concrete position for the role of textile thinking in the design research arena, in particular within the context of wearable technology and smart textiles for health data monitoring.

Using obesity as an example, co design methods are employed to show how textiles in on and around the body can form part of a solution to wicked problems in design.

question

How does the individual disciplinary language of practice influence issues around trust/reliability in interdisciplinary/cross industry collaboration?

Marita Sauerwein



keywords

Circular Economy, Product Design, Additive Manufacturing

affiliation

Delft University of Technology

Department of Design

Netherlands

bio

Marita Sauerwein perceived her master's degree at the Industrial Design Engineering faculty of Delft University of Technology and studied at the Royal Academy of Arts, the Hague. She worked for one year as a research assistant and freelancer. Now, she is a PhD candidate at the Circular Product Design research group in Delft. She studies the role of additive manufacturing, or 3D printing, in design for a circular economy.

research

Additive manufacturing (AM) is seen as a production process that could support design for a circular economy. Literature describes the potential advantages of AM on a conceptual level, but there is a lack of empirical data about the contribution of AM in this context.

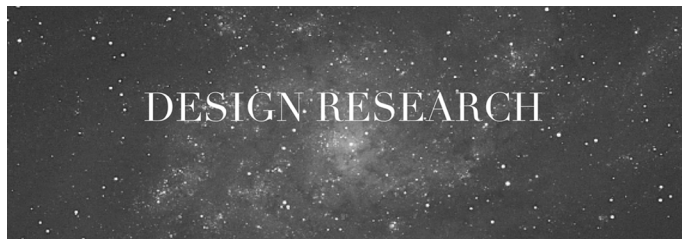
The aim of this research is to understand the role of AM in design for a circular economy and communicate this to product designers for application. Following the Research Through Design method, the topic is approached from two perspectives, that is the material and design perspective. Research into environmental friendly and recyclable materials for AM should result in a justified fit of this production technique into the CE. Recently, we developed a recyclable 3D printable material from redundant mussel shells. Research into the role of AM in design projects conform circular economy principles should lead to understanding about how AM can be applied in this context.

question

How can designers use additive manufacturing to create sustainable user-product relationships?

Marta Camps

[HTTP://WWW.BAUED.ES/EN](http://www.baued.es/en)



keywords

Design research, Unusual epistemologies, Pedagogy

affiliation

Bau

Design College of Barcelona

Spain

bio

Marta Camps collaborates with GREDITS, Group of Research in Design and Social Transformation at Bau Design College, Barcelona. Her current research project explores, from a pedagogical perspective, the tensions between regulated forms of knowledge and wilder forms of wisdom and learning that take place in the context of the art and design workshops based practices. Her research interests include design research artifacts and methods (diagrammatic, tinkering) and unusual epistemologies.

research

The current PhD research project explores, from a pedagogical perspective, the tensions between regulated forms of knowledge and wilder forms of wisdom and learning that take place in the context of the art workshop or studio based practices. This work looks into hybrid spaces of knowledge where the epistemological foundations inherited from modernity can be shaken and put into question. Challenging the binary logic that still today structures our cultural and pedagogical practices, which create a rift between thinking from doing, deduction and intuition, presentation and representation, nature and culture, subjects and objects, etc. It is in this context that I analyze the art and design workshop as a playful space that opens the possibility to displace the scientific paradigm as a locus of knowledge allowing other types of wisdom to emerge. I will introduce key concepts of my current research through a specific practice, the construction of color taxonomies, drawing monsters, and diagrammatic thought which I have developed as different workshops.

question

How can we think about design research as a situated practice, with its specific research materialities, languages and epistemologies?

Meg Parivar

[@MA_PARIVAR](https://www.instagram.com/ma_parivar)



keywords

Design against Crime, Design Thinking, Organisational Change by Design

affiliation

Lancaster University

Lancaster Institute for the Contemporary Arts (LICA)

United Kingdom

bio

Meg has a first-class honour degree in product design from the University of Salford and a master's degree with distinction in design management from Lancaster University. Currently, she is a PhD design research candidate at Lancaster. Her research focus is 'design against crime to reduce shrinkage in the retail sector through design thinking'. This study highlights design against crime elements when designing an innovative loss prevention framework for an organisation.

research

This research project examines how retail criminal activities impact retailers in the United Kingdom and how crime prevention through 'design against crime thinking' precipitates to reduce the shrinkage of the businesses by considering organisational behaviour and changes. The study has commenced developing an insight based on empirical evidence to see how the relationship between organisations and designers has a positive effect on loss prevention practices and outcomes. As the Police has confronted losing budget, it would be more beneficial for them if retailers will be able to prevent criminal retail activities fundamentally. When retailers suffer, they cannot make a full contribution to the economy, and it will be pressure on the Home office and government. Empirical evidence enables this study to achieve invaluable knowledge with observation and a diary for the efficient recording of the environment, people, behaviours and relations. The research method uses a qualitative study approach to identify the core issues, through focus interviews with the particular retailer. The possible concepts could be in the form of an innovative loss prevention toolkit, policy or framework.

question

As a designer what is the best approach to collaborating with policymakers to precipitate the process?

Michelle O’Keeff

[HTTPS://COMMUNITIESOFPRACTICEFORSTEM.WORDPRESS.COM/](https://communitiesofpracticeforstem.wordpress.com/) @MICHELLEOKMEDIA



keywords

Communities of Practice, The Internet of Things, STEM

affiliation

Cork Institute of Technology

Media Communications

Ireland

bio

I am a second year PhD student based in the Nimbus Centre at the Cork Institute of Technology (CIT), Cork, Ireland. My supervisors are Dr. rer nat Trevor Hogan and Dr. Kieran Delaney. I have a background in Multimedia, graduating in October 2015. The title of my research project is “Exploring the role Communities of Practice and UMI Technologies play to support and enhance the learning of STEM for second-level students.”

research

The title of my PhD is “Exploring the role Communities of Practice and UMI Technologies play to support and enhance the learning of STEM for second-level students”. My research is situated in the field of Communications Technology but at the intersection of Human-Computer Interaction and Interactive Design. My research is funded by UMI-Sci-Ed, which is a European Union Horizon 2020 funded project. This project aims at exploiting Ubiquitous Computing, Mobile Computing and the Internet of Things (UMI) to promote Science Education and enhance the attractiveness of Science Education and careers for young people via the use of the latest technologies. The aim of my project is to explore the role COP and Technology can play in stimulating the learning of STEM subjects in secondary schools and to explore the use of UMI technologies (i.e. Ubiquitous computing, Mobile computing and the Internet of Things) to enhance learning in the classroom and strengthen the communication between members in a COP. I have conducted an extensive literature review of the term communities of practice and I am currently in the process of (i) investigating what the key characteristics of a COP are, and (ii) how do they appear in the Coderdojo community.

question

How can the latest technologies and the use of an online environment help student’s learning and understanding of STEM topics?

Monica Lindh Karlsson

[HTTP://WWW.DH.UMU.SE](http://www.dh.umu.se)



keywords

Together, Plural Radical Democracy, Research Through Design

affiliation

Umeå Institute of Design, Umeå University

Umeå Institute of Design, Research Studio

Sweden

bio

Monica Lindh Karlsson, PhD student (industrial design) at UID. Her research aim to conceptualize contemporary design doing together, a shift from togetherness as ‘what’ to ‘who’, questioning the role of the designer as authority. 2007-2013 she researched on multi-disciplinary practices within the research network PIE-p. 2007-2009 Monica conducted Artistic Development Work exploring subjectivity, reflexivity and design methodology involving her self and social vulnerable (homeless) in forms of narratives. Professional designer.

research

Given the needs to develop efficient and reliable structures subordinated industry, industrial design practice have over the years been structured, conditioned and conducted in particular ways to support multi-disciplinary collaboration, emphasising ‘what’ competences are needed and when to bring them into a process. Hence the designer has been the authority and coordinator of knowledge and expertise and responsible for bringing together a whole.

Given our current political, societal and cultural situation with e.g. globalization, we witness emerging democratization, dissolving cultural borders and diffusion of identities, emphasising involvement acknowledge differences and diversity rather than generalisations. In our present situation there is a need to understand and explore alternative ways of contemporary design doing together in industrial design and a shift from ‘what’ to ‘who’. My research has been situated in higher design education and approach with a RtD approach. I position my research question and inquire into an industrial design practice and aim to investigate togetherness in design doing as a collaborative practice, within a post-industrial and a post-modernist framework. My research studies aim to examine and articulate alternative concepts of doing design together, questioning the role of the designers. The overall research question concern conceptualization of contemporary design doing?

question

In what way can practice-based design research move beyond current historical design practice structures and break with ‘old’ structures to make a change?

Naureen Mumtaz



keywords

Participatory, Transformative, Catalytic design research

affiliation

University of Alberta

Interdisciplinary (Design Studies + Secondary Education)
Canada

bio

I am a Ph.D. candidate at the University of Alberta. My research involves participatory design and collaborative design thinking within culturally diverse communities of new immigrant/refugees and Urban Aboriginal youth. Trained as a graphic designer, my professional and academic experience is highlighted by my strong affinity for social justice and wellbeing issues. I believe in pedagogy and research that draws from the thorough understanding of local contexts and epistemologies. In my work, I enjoy crossing boundaries and linking seemingly unconnected dots.

research

The responsibility of being a socially conscious design educator and a practice-led researcher calls for me to encourage individuals, communities, and systems, to better understand cultural, social and environmental needs and responsibilities by employing catalytic design thinking skills. In this spirit, my Ph.D. dissertation project titled "Towards a pedagogy of intercultural understanding: A participatory design study with youth from urban Aboriginal and newcomer communities" is undertaken to move beyond the mere celebration of multiculturalism in Canada, to finding ways to re-shape inter-cultural understanding between youth from ethnoculturally diverse and socially marginalized communities. My work is informed by participatory values and critical thinking paradigm. This study involves initiating and facilitating several youth-engaged 'sharing circle' discussions and 'design thinking circles' in local communities' settings. The youth-engaged study work has shown to enhance the intercultural capacity of participating youth, as leaders in their communities. It is hoped the outcomes of the study will contribute to new knowledge in the fields of practice-led design research and curriculum inquiry. Findings of the study will inform community responsive curricula to advance better intercultural understanding amongst youth—a need in our current times, in a climate of increasing xenophobia. Acknowledging my practice-led research contributions for promoting intercultural understanding I have been recognized by the University of Alberta and the Edmonton Community Foundation, through their respective scholarship awards.

question

What is the potential for design-led research to offer to the interdisciplinary research community to help grapple with the complex wicked problems in the social realms, we now face as individuals and communities in our globalised realities? Why are designers well suited to envision a socially just and decolonized future? Can compelling visions of a transformed future change the way we frame design projects/solutions in the present?

Nicholas Baroncelli

[HTTP://UID.UMU.SE TORRETTA](http://uid.umu.se/torretta) @NICHOLAS_BT



keywords

Sustainability, Decolonization, Anti-oppressive pedagogy

affiliation

Umeå University

Umeå Institute of Design
Sweden

bio

My work is situated in participatory Design for Sustainability (DfS) with focus on sociocultural and political aspects of DfS. My experience is with governmental organizations, NGOs, grassroots, universities and research institutes. Have worked in diverse contexts, from sustainable urban development with UN in Mozambique, Design Possivel in Brazil and grassroots communities in Finland to experiential learning and immigration projects with the Interactive Institute and indigenous communities in Sweden.

research

My research concerns learning in doing social innovation for sustainability. The overarching frame is of learning to design from a planetary perspective, asking "how do we design since we are together anyway?". I argue that, if we do not pay attention to the possible consequences of our work for sustainability we may end up, unwillingly, sustaining harmful relations such as oppression, authoritarianism and colonization. Being learning a natural consequence of being together (Wenger, 1999) I frame the behavioural consequences of designing for sustainability as learning, for the behaviour teaches what is acceptable to do and act in and for sustainable futures. That is, are we, in our work for sustainability teaching that it is acceptable to be oppressive and to not allow diverse worldviews and value systems and thus to use our sustainability agenda as colonizing apparatuses? From this understanding, my focus is on understanding and leveling power structures in participatory processes towards more democratic ways of working for sustainability.

question

How can we position design and the direction of change in a way to allow multiple forms of expression (cultures) to thrive and flourish in equality?

Niina Turtola

MINISTRYOFTRUTHANDTYPOGRAPHY.BLOGSPOT.COM



keywords

Critical graphic design, Experimental typography, Defamiliarisation

affiliation

**University of Lapland, Faculty of Art and Design
Culture-Based Service Design Programme
Finland**

bio

I am a doctoral candidate of practice-based design research, focus on critical graphic design practice and artistic research since 2015. I have publishing one article/poster at IASDR2017, USA. I am preparing my second article to be published in 2018 in Finland. I have received several smaller grants, exhibited globally. I reside in Namibia. I was born and educated in Finland. This setting gives a distinctly alternative tune to design research.

research

Niina Turtola is a doctoral candidate at the University of Lapland, Faculty of Art and Design in the Culture-Based Service Design Programme. She is a graphic designer that pushes the envelope of critical practice and artistic research in academia to create larger multi-disciplinary debate about the blindspots of text-based conventions in our everyday lives: to generate a critical spectator. Turtola is currently working on her practice-based doctoral research titled "The New Typographic Criticality". She has a multi-disciplinary background in education, business and visual communications. In her thesis, Turtola discusses how she has used the theory of defamiliarisation and shows experimental and radical typographic design work that leaves the viewer asking questions: Why? The objective of her thesis is to expand the thinking mind and to highlight how this can be done with experimental, typographic critical design practice.

question

How can design research community open gates to access the research into larger scales of corporate communication to replace the current neo-liberal and commercially oriented practices with a critical practice of graphic design?

Pankhuri Sanjay Jain

[HTTP://PANKHURIJAIN.STRIKINGLY.COM/](http://PANKHURIJAIN.STRIKINGLY.COM/) @ PANKHUREE



keywords

Modular, Critical, Engaging

affiliation

**Edinburgh Napier University
School of Arts and Creative Industries
United Kingdom**

bio

My PhD research project titled 'Potentiality of Play' is driven by complementary methods of Design Ethnography & Research through Design. It aims to explore existing avenues of multi-sensorial design within cross-cultural, playful learning environments (specifically Montessori schools) across Scotland and India. I have previously worked as a Graphic Designer, Usability Analyst and Design Ethnographer with Design studios and research firms in India and South Africa.

research

My cross-cultural ethnographic study of Montessori's work for the past year shows that her universalised material menu is designed to be highly prescriptive and work in a specific prepared environment, where Montessori stipulates that children learn through training their senses in isolation. This theory falls in flux with Wood, Bruner and Ross's (1976) theory of Scaffolding, where children overcome learning barriers through interaction and timely support from peers and adults as well as Harel and Papert's (1991) theory of Constructionism, where children construct their own knowledge through explorative, at times destructive and open-ended play. I have observed how designed affordances (Gibson, 1977) are immersed in Montessori's material menu. I am interested in studying how children can explore materials in a cross-sensorial manner, through explorative and flexible play, to eventually question and possibly hack the material's properties and limitations. I would like to design props where children were allowed to conceptually manipulate senses and possibly create new affordances. I am currently working on the second stage of my research, which involves designing and prototyping toys and educational tools. This will eventually culminate in participative and interaction based research with students and teachers to gather insights and test concepts.

Gibson, J.J. (1977). The Theory of Affordances (pp. 67–82). In R. Shaw & J. Bransford (eds.). *Perceiving, Acting, and Knowing: Toward an Ecological Psychology*. Hillsdale, NJ: Lawrence Erlbaum.

Harel, I., Papert, S. (1991). *Constructionism*. Norwood, N.J.: Ablex.

Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem-solving. *Journal of Child Psychiatry and Psychology*, 17, 89-100."

question

How can design research develop avenues for conceptual and creative modification for children within Play-based learning environments?

Pauline Clancy

[HTTP://WWW.PAULINECLANCY.COM](http://www.paulineclancy.com) @ PAULINECLANCY



keywords

Typography, Experimentation, Meaning

affiliation

Ulster University, Belfast

Belfast School of Art

Northern Ireland

bio

My experimental or expressive typography practice explores the relationship between typography and language and typography and place. Experimental typography is used as a means to generate typographic images where cropped elements and overprinted areas create other abstract forms. While finished artefacts are important, the experimental/making process is of equal importance, where the process also becomes the outcome.

research

Typography, the visual manifestation of language communicates meaning through alphabetic and non-alphabetic forms, which in turn are producers of linguistic value. In this study, the inter-relationship between language, typography and communication is explored and questioned through the process of experimental typography. Through a series of practice-led formal and non-linear typographic experiments, letterforms and glyphs are deconstructed and framed in alternative ways.

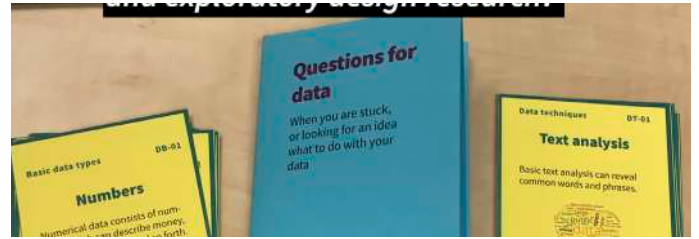
As a communication device, typography embraces two opposing positions, rational, where typography is an 'invisible' conduit of information, and abstract, where typography becomes non-linear, unconventional and pushes boundaries of legibility and readability through experimentation and manipulation. Experimentation in a scientific context is an empirical procedure carried out to examine a hypothesis in a controlled environment in order to seek a definitive set of readings or outcomes. In contrast, when experimentation is applied to typography, an open, fluid, non-formulaic relationship is formed where boundaries of typographic forms are examined and manipulated without any pre-determined outcomes. Experimentation in this sense is an interactive process whereby new readings of typographic forms can be viewed and interpreted. Synthesising practice with semiotic and communication theory, this study examines how typographic abstraction can reconfigure meaning and offer alternative readings in the visual presentation of language.

question

In what way can practice-based design research offer alternative ways of 'communication'?

Peter Kun

[HTTP://PETERKUN.COM](http://peterkun.com) @KUNIIII



keywords

Democratization of data, Research techniques, Generative design research

affiliation

Delft University of Technology

Research Media Interaction Design

Netherlands

bio

Peter Kun is a 3rd year PhD candidate in Design at TU Delft, with an MSc in Interaction Design and Technologies from Chalmers University of Technology (Gothenburg, Sweden). In his research, Peter looks into the intersection of design research and data science, and seeks new design techniques for exploratory and generative design, where data is used to fuel creativity, inform design concepts and be a source for inspiration.

research

Design research is applied for increasingly complex problems in an increasingly complex world. In the meanwhile, this complex world is getting more-and-more described via digital data – a resource that designers could utilize in their research. Yet, today it is little explored how could digital data be used in the design research process, and general data competencies are also uncommon for designers.

In this project, I research how other, end-user professions have developed know-how around the utilization and sense-making of digital data, and explore new design techniques with digital data. So far in my project, I have conducted studies with designers to explore how end-user data tools (tools data journalists or librarians use) are being appropriated by designers for the design process. Based on the insights, I have developed design techniques for utilizing data in generative design research, which study and technique I will present at DRS2018.

In my work I argue that the exploration and sense-making of digital data can complement other, commonly used design research techniques such as interviews or ethnographic studies in the early design process.

question

How can digital data help designers in understanding of the world?

Rahmin Bender

[HTTP://CREATIVO.DESIGN](http://creativo.design) @CREATIVODESIGN_



keywords

Design Thinking, Systems Theory, Regenerative Design

affiliation

Fielding Graduate University
School of Leadership Studies
United States

bio

Rahmin Bender is an Entrepreneur, Social Psychologist, and Academic focusing on the application of design research and creativity on business and policy. Mr. Bender works and conducts research at the crossroads of management consulting, policy making, marketing and design with the goal of engaging in co-creation of products and services on all levels for social impact and address wicked problems.

research

Design Thinking is a widely used methodology for product design and development that is firmly established in systems thinking which has human-centered approaches and environmentally-focused sustainable methods. Through a distilled design structure with three key design thinking and doing elements a unified and flexible methodology can take shape that can be galvanized with dual considerations towards environment and people. Core values based on systems interactions and regenerative design principles will be established to inform a design process that is equitably sensitive to human and ecological systems.

question

How can design research be used to create services that are more sensitive to human and ecological systems?

Rose Dumesny

[HTTP://SENSDATA.HYPOTHESES.ORG/](http://sensdata.hypotheses.org/)



keywords

Tangible, Design Process, Data Representation

affiliation

Université de Nîmes and Sense
Projet (EA7447)
France

bio

I am product and interaction designer and I actually lead a PhD within Sense, a social science entity in Orange R&D, and Projekt, a laboratory of Université de Nîmes. My researches focuses on installation that allow people to understand and appropriate themselves the data they are producing.

research

The design of data describes a field of research, exploration and experimentation around the digital data to create “objects” (visual representation, materialization, etc.) so that everyone can perceive and understand. From this point of view, mastering the layouts of the data and their interpretation is a major issue. In this context the objective of this PhD thesis is to provide elements to understand the digital uses of today and better anticipate the needs they generate, by studying digital data perception. The data would then become a raw material, as well as wood or metal, and a designer approach to study, obvious. Indeed proposing new ways to get fit, give meaning and construct sense perceptions, the design could create new experiences, new services, new interactions and especially new emotions and thoughts.

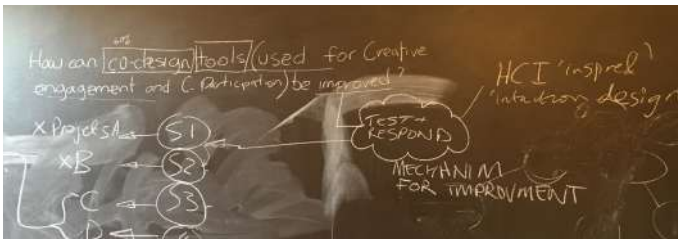
This research work highlights how design approach allows to feel differently digital data and opens tracks to propose an experience that makes people actors of a digitalized world.

question

How design could produce tangible mediations that allow people to control the recording of their digital life ?

Rosendy Galabo

IMAGINATION.LANCS.AC.UK/PEOPLE/ROSENDY_F_GALABO @ROSGALABO



keywords

Creative engagement, Tools, Tool design

affiliation

ImaginationLancaster, Lancaster University
Lancaster Institute for the Contemporary Arts (LICA)
United Kingdom

bio

Rosendy is a PhD student at the Lancaster University. He obtained his MSc in multimedia design at the UFMA/Brazil. He has a background in interaction design, and his previous research was focused on authoring tools. He worked at SENAI/Brazil as a research fellow, where became interested in creative engagement. His current research focuses on tool design and creative engagement practices, seeking to improve engagement tool interactions within a co-design space.

research

Creative engagement activities are being used to enable expressive dialogue between public sector workers and community they represent, aiming to understand social situations and individuals. Increasingly, public sector practitioners are turning to design as a catalyst to improve their engagement practices. This often takes the form of designing tools or resources used by public sector workers.

My research explores how creative engagement tools can be improved. It explores an improvement framework, which looks at strategies to improve different aspects of tool interactions in engagement activities, such as design, facilitation, participation and collaboration. It aims to improve creative engagement processes and to contribute to tool design and co-design theories and practices.

question

How can a practice-based design research be a catalyst for change in societies with hierarchical cultural values?

Rowan Page

keywords

Medical devices, Co-design, Speculative Design

affiliation

Monash University, Melbourne
Research Media Interaction Design
Australia

bio

Rowan Page is a lecturer in Industrial Design at Monash University. Rowan's PhD explores how design research and practice can facilitate greater engagement with the recipients of medical devices during the formative stages of R&D. Research undertaken in collaboration with implantable hearing prosthesis manufacturer Cochlear Ltd. His research interests include co-design, speculative design, digital fabrication and the function of designed artefacts as boundary objects within collaborative and interdisciplinary design projects.

research

Use errors are the leading cause of failures with medical devices. This PhD research examines how contemporary methods of design research and practice can better include users in the medical device design process. Augmenting and enhancing the existing usability design guidance provided by regulatory bodies. Regulatory guidance that is primarily informed by engineering practices of testing, validation, and problem-solution approaches. Approaches that limit engagement with the wider experiences of device recipients. This research seeks to uncover information about use in the formative stages of device development, through prototyping and collaborative design practices together with device recipients. Involving these users in stages of the design process where interventions can still be made. These methods are applied and evaluated through a series of speculative co-design projects with device recipients, focused on understanding the use impacts of future medical technologies. These projects were grounded in the design of external devices for cochlear implant systems in collaboration with Cochlear Ltd. This research has led to several medical devices currently in production, and to several utility patents. Ultimately, the outcome of this research is a framework for conducting these iterative, collaborative, speculative, cycles of design activity to empower recipients to contribute meaningfully to an understanding of medical device technologies within the formative stages of their development.

question

How can the methods and processes of design allow us to help communicate and translate the complex ideas under development in the early stages of R&D, to the people who will ultimately be impacted by them, quickly, iteratively, and in a way that respects the valuable contributions of everyone?

Saara-Maria Kauppi

SAARA-MARIAKAUPPI.MYPORTFOLIO.COM/PROJECTS



keywords

Edible insects, Design research, Consumer behaviour

affiliation

**Norwegian University of Science and Technology (NTNU)
Department of Design
Norway**

bio

Saara-Maria Kauppi is a graphic designer and PhD student working with edible insects and design at NTNU Norway. She studies consumer behaviour and design in order to adopt insects into Western diets. Her PhD is a three-year EU funded project and the goal is to find concrete proposals to make people (including herself) eat more insects through design interventions such as packaging design and food design.

research

Edible insects are regarded as one of the most sustainable animal protein source in our planet. Currently two billion people eat insects as part of their daily diet, but for us Westerners insect eating feels unusual. Due to the dietary culture in the West, edible insects face many obstacles when introducing them to new consumers. Design interventions such as packaging design and insect food design could facilitate the adoption process. Understanding the obstacles and creating solutions through packaging design and insect food design could help making insects part of the Western diets. Furthermore, small businesses arise in the field of edible insects that require more knowledge how to design products, market insects or involve consumers in the development processes. Empathetic approach and understanding consumer behaviour is highly required, when introducing novel foods with such a strong cultural objection like edible insects.

The research includes working with insect start-ups, creating packaging design concepts for testing together with design students and being an active part in the edible insect field. Working as a designer and lecturer, and learning from companies, consumers and design concepts is a big part of the research to find the means to introduce edible insects in the West.

question

What is the change that you want to make and how are the consequences of that change analysed in your research?

Saoirse Higgins

PAPAYSHORELINERESearchSTATION.WORDPRESS.COM/



keywords

Anthropocene, Survival, Tools

affiliation

**Glasgow School of Art
Innovation School
Scotland**

bio

Saoirse is an art and design researcher, currently based on the island of Papa Westray, Orkney. She is in the final year of a practice based PhD from Glasgow School of Art. The research topic looks at 'Survival Tools of the Anthropocene'. The research aims to develop a new vocabulary of human action using new forms of participatory action research. She collaborates with the Papay community and British Science Association.

research

A need has grown for fresh vocabularies and narratives that might account for the kinds of relation and responsibility in which we find ourselves entangled' (McFarlane,2016).

Environmental writer Robert McFarlane speaks of the crucial role he envisages for designers to create a fresh viewpoint from which to move forward in this current world state. He refers specifically to the world of the anthropocene. The anthropocene refers to the current geological era of change to the planet caused by humans. This research contributes to McFarlane's call for a new vocabulary and way to view survival through new forms of design research methods. The macro scale and complexity of the issues of climate change makes the urgency of the problem hard to grasp for citizens, apart from reacting to changes as they happen. The research reactivates the distinct ways of knowing our surroundings and develops a new sense of 'response-ability' (Haraway, 2016). In other words-developing the right conditions to take effective action. Designers have an important key role to play in this shift forward, inverting the anthropocene from macro deep time to a short thin wedge of time, moving towards a future more grounded era of awareness and stability.

question

How can we as designers and artists contribute to a new form of survival in the anthropocene?

Sarah Hayes

[HTTP://DATAPHYSFORSTEM.WORDPRESS.COM/](http://dataphysforstem.wordpress.com/) @SHAYESRESEARCH



keywords

Data Physicalization, Tangible Interaction, Design-Based Research

affiliation

Cork Institute of Technology
Media Communications
Ireland

bio

I am a second year student completing my PhD in Cork Institute of Technology. My research supervisors are Dr. Trevor Hogan and Dr. Kieran Delaney. I graduated from CIT in 2015 with a Bachelor Honours Degree in Multimedia. The title of my research project is 'Data in Space and Time: Exploring the Potential of Physical Data Representations to Enhance STEM Learning'.

research

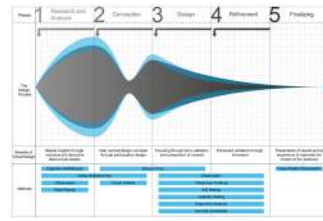
My research is focused on exploring how two relatively new fields of research – Tangible Interaction and Data Representation - can be used to design and develop technological solutions that will benefit STEM learning. Tangible Interaction refers to interacting with digital information using physical objects, which fosters more intuitive and effortless engagement with interfaces. Living alongside this concept is the field of Data Representation, which looks at how data can be conveyed using non-traditional modalities, e.g. sound, haptic feedback. The aim of this research is to develop solutions based on each of these concepts that can be used to represent concepts relating to STEM to further student engagement and learning. The initial focus of the project will be based around developing a series of data representation platforms that will in some way support STEM learning. These platforms will be created from a Design-Based research perspective, with users being involved throughout the process, from ideation to development to evaluation. Workshops based around prototyping, design and technology concepts will be used to include users in the design process. The designs will be deployed in different learning settings, such as classrooms and museums, to determine their effectiveness.

question

How can design techniques and technologies be made more accessible for non-experts so that they can be empowered to develop their own solutions?

Sebastian Stadler

[HTTP://TUM-CREATE.EDU.SG](http://tum-create.edu.sg)



keywords

Design Process, Virtual Reality, Usability

affiliation

TUMCREATE Ltd.
Design for Autonomous Mobility
Singapore

bio

After the graduation from the chair of Industrial Design of the Technical University of Munich, Sebastian Stadler joined TUMCREATE Ltd Singapore as Research Associate and PhD student in January 2017. Within his research, he investigates the systematic integration of Virtual Reality into the Design Process. Case studies for his research cover the communication between level 5 autonomous vehicles and human road users in Singapore.

research

Especially in the field of transportation, development is fast-paced and inexorable. How designers can keep up with this fast development while still being able to design products that are usable for people and avoid flooding the market with useless products? Within the research, it is investigated how Virtual Reality (VR) can make the link between fast technology development and traditional industrial design. The hypothesis is that VR supports Designers in focusing on users' needs and wants but gives them flexibility for products and services design in this fast paced world. Beyond this, it is investigated how this integration and development of technology changes the Designers' role in the future. VR has the potential to support problem statements. This can happen through observation of users who are immersed in the environment of context. Furthermore, together with users, concepts can be created within VR workshops. Finally, VR allows a validation of concepts regarding usability without the need to build up costly and time consuming prototypes especially when there is no prototype available, feasible, or too costly.

question

How can VR influence the role of Designer in the fast paced world while supporting the development of usable products, which focus on users' needs and wants, instead of flooding the market with useless products and furthermore, with the integration of VR into the Design process, how will the designers' role change in the future?

Silvia Mata-Marin

@SILVIAMATAMARIN



keywords

Bordering systems, Migrants, Social practices

affiliation

Carnegie Mellon University

School of Design

USA

bio

Mata-Marin is a researcher from Costa Rica and has done work documenting living conditions of indigenous migrant communities in Central America and developing culturally-appropriate information resources for Spanish-speaking asylum seekers in the United States. As a PhD candidate, she is currently doing research on bordering systems and how they shape practices of migrant populations.

research

Processes of reinforcing borders can assume different forms. The traditional idea of a border as an entity that lives at the 'edge' of the state is slowly being replaced by the notion that— through the diversification and multiplication of borders—, borders have moved from the 'edge' to the 'center' of public space and everyday life. Shifting this understanding about borders allows us to start identifying living conditions of populations that are forced to dwell permanently in what Anzaldúa (2012) referred as the borderlands— "a vague and undetermined place created by the emotional residue of an unnatural boundary". My research aims to identify some of these 'unnatural boundaries' either found or created by the design of systems, artifacts, and services in everyday life: biometrics, credit cards, identification cards, access to health care, education, public transportation systems, among others. My research also seeks to uncover some of the ways and practices migrant populations develop to navigate and negotiate these systems to carry out everyday life in their new countries.

question

If we understand the role design—understood as artifacts, systems, services and technologies of everyday life— plays in the establishment of sovereign power and control that perpetuates social inequality issues and prevents migrant populations from carrying out basic practices necessary in their new countries; then can we start designing in ways that are more inclusive and aware of changing demographics?

Teksin Kopanoglu

[HTTP://WWW.TEKSINKOPANOGLU.COM/](http://www.teksinkopanoglu.com/) @TEKSINKOPANOGLU



keywords

Design for self-management, Chronic conditions, Health and well-being

affiliation

Cardiff Metropolitan University

PDR International Centre for Design and Research

United Kingdom

bio

Teksin's doctoral research aims to co-design products and services to facilitate self-management of people with lymphoedema. She is interested in applying human-centred design approaches in healthcare. Prior to starting her PhD, Teksin worked as a product designer for a decade, both in-house and independently consulting throughout new product development processes. She has MSc degree on the determination of user requirements of interactive systems.

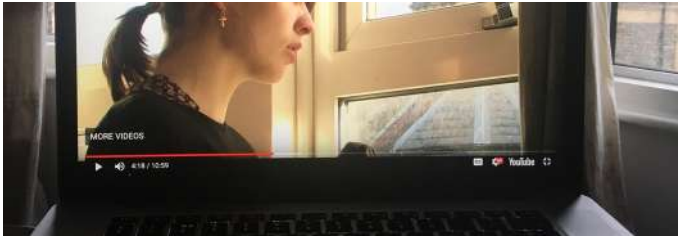
research

The aim of my research is to explore how people with chronic conditions (specifically with lymphoedema) experience the transition towards self-management, and co-design products and services to support this process. Lymphoedema is a chronic swelling, which require a life-long self-management of wearing compression garments, doing skin care, massage and exercise. Management of lymphoedema involve self-monitoring to understand the possible reasons of increased swelling and change the aspects to compensate for fluctuations. Developing these skills need trial & error and many people with this condition are having difficulties. Not managing lymphoedema may lead to advance swelling, fibrosis and recurrent skin infections. People with lymphoedema are going through multidimensional stages towards achieving expertise and daily routine. I am analysing this context for design and explore design implementation that facilitate this transition. With the increasing emphasis on self-management for the efficiency of healthcare, I believe my research will present design approaches and opportunities for other chronic conditions as well as design for health and wellbeing in wider context.

question

How can design research make the best use of multidisciplinary literature describing the experience of users/people/patients?

Tot Foster



keywords

Video, Non-profit, Grassroots

affiliation

The Open University
The Design Group
United Kingdom

bio

As a mature student my background is Documentary at the National Film School, directing television, and developing media for non-profits and HE. I was switched on to research when I became part of a multi-disciplinary team at the Open University examining 'cultural value'. Then mentoring and production for small charities led me to my PhD topic; I saw how organisations need a production model that fits their own particular imperatives and context.

research

In this era of increasing reliance on non-profits to meet basic social needs, effective digital communications are crucial to small charities. This research focuses on video. An initial study of 400 YouTube videos, eleven interviews with managers, and other methods, showed the majority of small charities have not engaged with video, and if they have, videos are often generic and uninspiring. Significant barriers to production were identified including limited resources, ethical requirements, and attitudes towards both the medium of video, and the demands of production. Charities are conscious of lagging behind, and recognise potential benefits – e.g. to tell stories that can reach new service users. But where to start? This study brings design thinking to the problem by creating a template for grassroots production based on the principles of iteration and collaboration. This will be supported by resources which offer stimuli for creative inspiration, and practical advice. The aim is to increase organisations' capacity for production by offering a structured means for inexperienced producers to interrogate message, process and visual style. The template is being tested in three case study charities. Hopefully the published outcomes will help equip small charities for their digital future, enabling their stories to change lives.

question

How can design research support organisations with little resource to participate fully in an increasingly digital world?

Xaviera Estrada



keywords

Degrowth, Resilience, Diversity

affiliation

Umeå University
Umeå Institute of Design
Sweden

bio

I studied Industrial Design and worked on interior and commercial furniture design. Years later I got involved with social sustainability and participatory design, then co-founded 'Design Your Action', an NGO based on these principles. I was also a design teacher in two universities in Mexico (2014-2017), focusing on new roles of design and social innovation projects. Recently, I have started my PhD studies, interested on degrowth, resilience and sociocultural diversity.

research

The transition to more sustainable societies carries challenges that require collaborative work. At the same time, there are urgent crises that need timely and creative responses. Co-design can be a way to facilitate the processes of collaborative and creative change in communities. However, its methodologies and tools come from a very specific context, which often diminishes their potential when applied to issues that occur outside circumstances similar to those where the co-design tools were originated.

I aim to explore the possibilities of co-design through an exchange of visions, based on the approaches of degrowth (D'Alisa, et al., 2015) and the Epistemologies of the South (Sousa, 2011). Both visions have an emancipatory purpose to transcend current hegemonic social interactions and may work as a basis in the search for alternative and sustainable ways of life.

I seek to face co-design tools and methodologies to realities different from those of their origin, and bring other knowledge to the discussion of co-design for social transformation, beyond the dominant one. This exchange is needed, to imagine the post-capitalist world with a wider variety of references, and sharing the benefits of what has been done through collaborative processes in both the North and the South.

question

Practice-based design research is about intervention. When these interventions are carried out in contexts where there is a different value system, how can designers/researchers connect and learn from those values (and therefore catalyze personal change) to intervene in a more equitable and less imposing manner?

Xueliang Li



keywords

Interaction design, Stress management, Wearable technologies

affiliation

Technology University of Delft
Industrial Design Engineering
Netherlands

bio

I'm a 2nd year PhD candidate from the Technology University of Delft. I finished my master in Jiangnan University, China, featured by product design and user research in healthcare. During my master, I went to the Technology University of Delft for an exchange for four months, working on a research proposal on health monitoring systems. This turned into a PhD position I'm doing right now.

research

Post-traumatic stress disorder (PTSD) is a mental disorder that can develop after having experienced a traumatic event. Veterans returning from military service are among those who are vulnerable to develop PTSD. Symptoms include intrusive thoughts and negative cognitions and moods, and could have an adverse impact on their life.

By doing this project, we aim to explore how to design smart wearables in 'meaningful' ways so as to help veterans with PTSD to cope with stress in daily life. We start this project with an exploratory study gaining a nuanced understanding of stress with smart wearables working as 'partners' to support them in their stress experiences. A set of subprojects are initiated focusing on different aspects of sensing and intervening using wearables. Relevant questions include:

How to align bio-sensed data with their subjective experiences in assessing one's stress status? How to intervene in stress management 'meaningfully' (as partners) with multimodal wearable technologies? And what are the impacts of embedding those design prototype(s) in social contexts? The findings and design prototypes generated from the process will also be generalized to benefit other group of people in need of managing stress continuously.

question

How to engage or transfer specific field knowledge (e.g. psychological theories on mental health) as design guidelines for technological applications (e.g. wearable technologies), and therefore contribute to both sides?

Zoe Bonnardot

keywords

Users, Energy, Involvement

affiliation

EDF R&D / Université de Nîmes / Université Technologique de Troyes
ICAME / Projekt / ICD-TechCICO
France

bio

Trained as a social designer (university of Nîmes), and as a urban designer (fine art school of Le Mans), I also made a stop by the co-design master program of KADK, Copenhagen. I'm currently in the middle of my first year as a PhD student in design and ergonomics, which is spread in between the university of Nîmes, technologic university of Troyes and the electric company EDF, in Paris.

research

Today, energetic services users (residential, tertiary and communities) are receivers, but tomorrow they will be producers themselves or engaged in a local production network. They will then be required to be active in the management of their own energy. In this context, this research work aims at understanding and designing user engagement modality in the energetic and digital transition. Particular attention will be paid to the link between the individual and collective commitment of the users. This research will lead to design tools and methods that allow us: to anticipate and project probable uses of energy in the medium term, but also to facilitate a commitment of users both alone and in community by the design of digital tools or services.

question

How does inputs of others disciplines play a role in the development of design as a catalyst for change ?